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The role of various types of print media in the choice of an optometrist

Abstract

Data on the general public's view of advertising in the field of optometry is sparse. One hundred subjects in a shopping mall setting completed a survey dealing with different types of print media used by optometr1c practices. The survey was comprised of seven questions with each question representing an area of practice. The purpose of this study was to explore the public's reactions to optometry's three most commonly used print medias for the use of advertising; newspaper, direct mailings and the yellow pages. Each subject also filled out a socio-economic profile. All socio-economic profile sub-divisions having at least 10% of the sample population were plotted to show relationships between the divisions and the subject's selections on each question. Contingency table analysis using the Chi-square distribution was performed to identify interactions of age, education level, sex, and income level with subject's responses to the survey questions. The goal of the study was to find which type of print media people use in their choice of an optometrist. The results of the study revealed the yellow pages as being the most popular form of print media when in need of an optometrist.

Degree Type

Thesis

Degree Name

Master of Science in Vision Science

Committee Chair

Willard B. Bleything

Subject Categories

Optometry

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THE ROLE OF VARIOUS TYPES OF PRINT MEDIA IN THE CHOICE OF AN OPTOMETRIST

By

TODD A. KELSCH

A thesis submitted to the faculty of the
College of Optometry
Pacific University
Forest Grove, Oregon
for the degree of
Doctor of Optometry
May, 1988

ADVISER:

WILLARD B. BLEYTHING, M.S., O.D.
DEAN OF OPTOMETRY

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THE ROLE OF VARIOUS TYPES OF PRINT MEDIA IN THE CHOICE OF AN OPTOMETRIST

TODD A. KELSCH Todd A. Kelsch

WILLARD B. BLEYTHING, O.D., M.S.

BIOGRAPHY

Name: Todd Allen Kelsch

I was born and raised in Mott, North Dakota. After completing high school in 1981 at Mott Lincoln High School, I entered North Dakota State University in Fargo, North Dakota. I attended N.D.S.U. for three years, 1981 - 1984, where I completed all my pre-optometry course requirements. In 1984 I was accepted at Pacific University College of Optometry in Forest Grove, Oregon. I received a Bachelor of Science degree at Pacific University in visual science, and will receive a Doctor of Optometry degree in May, 1988.

I am presently planning on joining a comprehensive, optometric practice in southern California as an associate, although this position has yet to be finalized.

ABSTRACT

Data on the general public's view of advertising in the field of optometry is sparse. One hundred subjects in a shopping mall setting completed a survey dealing with different types of print media used by optometric practices. The survey was comprised of seven questions with each question representing an area of practice. The purpose of this study was to explore the public's reactions to optometry's three most commonly used print medias for the use of advertising; newspaper, direct mailings, and the yellow pages. Each subject also filled out a socio-economic profile. All socio-economic profile sub-divisions having at least 10% of the sample population were plotted to show relationships between the divisions and the subject's selections on each question. Contingency table analysis using the Chi-square distribution was performed to identify interactions of age, education level, sex, and income level with subject's responses to the survey questions. The goal of the study was to find which type of print media people use in their choice of an optometrist. The results of the study revealed the yellow pages as being the most popular form of print media when in need of an optometrist.

ACKNOWLEDGEMENTS

Every thesis project relies on his or her immediate colleagues who have lent their support by discussing various ideas. In this connection, my thanks go to my colleagues at Pacific University College of Optometry: Anette Hikida, James Elm, Mike Houle, Teresa Johnson, and Bret Argenbright. Thanks also goes to the Dean of Optometry at Pacific University, Willard B. Bleything, for his generous support of my research and for serving as the adviser of this research project.

The research also benefited from the Macintosh SE computer belonging to Clifford Beaudoin, and from the computer knowledge and software supplied by Michael Young.

And finally, I would like to thank the management of Cascade Plaza, who made the survey possible by the use of their facilities, and all of the subjects who volunteered their time in filling out the survey.

INTRODUCTION

In today's age, marketing* is becoming an increasingly important issue in the optometric profession. In 1986, a study reported that 46% of the total number of surveyed optometrists used some form of advertisement to promote their practices, and the figure was expected to climb to 51% in 1987.[1] It is interesting to note that of the O.D.'s who were practicing 10 years ago, 8% were advertising at that time.[2] Although more stringent State regulations made advertising illegal in some circumstances prior to a decade ago, this small percentage does emphasis the dramatic boost in advertising in just ten years.

Data on the general public's view of advertising in the field of optometry is sparse. The purpose of this study was to explore the public's reactions to optometry's three most commonly used print medias for the use of advertising; newspaper, direct mailings, and the yellow pages. The goal of the study is to find which type of print media people use in their choice of an optometrist.

* A definition of marketing is research conducted to establish the extent and location of the set of actual and potential buyers of a product, or to analyze the cost of products or processes compared to the buyer's

alternatives.[3] The marketing concept holds that the key to achieving goals consists of determining the needs and wants of target markets and delivering the desired satisfactions more effectively and efficiently than competitors.[4]

Since it can take on many forms and accomplish a variety of things, advertising is not as easily defined as marketing. Advertising consists of any nonpersonal forms of communcation conducted through paid media to promote ideas, goods, or services of an identified sponsor.[5]

Marketing consists of everything a business can do to influence the demand for its products or services. The use of a marketing plan includes a set of controllable variables that the business blends to produce the response it wants in the target market. The set of variables can be divided into four groups; product, price, place, and promotion. Promotion is involved with the various activities undertaken by the business to communicate the merits of its products and services and to persuade target customers to purchase them. Advertising is a part of the promotional scheme presented by a business and is used to let the public know what the business has to offer.

FIGURE 1.

Imagine yourself in the following situations and select one of the types of advertising for each question.

1. You have worn glasses for many years and now you would like contact lenses. Which type of advertising would you find most beneficial in this situation?
ADVERTISEMENT: A B C D E F

2. You have broken your only pair of glasses and you need to get them replaced.
Which type of advertising would you find most beneficial in this situation?
ADVERTISEMENT: A B C D E F

3. For the past 2 days your eyes have been red, swollen, and very itchy.
Which type of advertising would you find most beneficial in this situation?
ADVERTISEMENT: A B C D E F

4. Since your glasses look old and outdated, you decide that you're ready for a new fashion change.
Which type of advertising would you find most beneficial in this situation?
ADVERTISEMENT: A B C D E F

5. You have a child in the 3rd grade, who according to the teacher is having problems in reading and writing skills.
Which type of advertising would you find most beneficial in this situation?
ADVERTISEMENT: A B C D E F

6. Your eyes have never given you any problems, but just recently you notice that your distance vision isn't as clear as it used to be.
Which type of advertising would you find most beneficial in this situation?
ADVERTISEMENT: A B C D E F

7. You are having no problems at all with your eyes, but you feel it's time for a eye check-up.
Which type of advertising would you find most beneficial in this situation?
ADVERTISEMENT: A B C D E F

FIGURE 2.

SOCIOECONOMIC PROFILE

1. AGE

A. 14-24 Years

B. 25-44 Years

C. 45-64 Years

D. 65 and over

2. HIGHEST EDUCATION LEVEL

A. High school graduate

B. Vocational / Tech School

C. College 2-4 years

D. College 4 years and +

3. SEX

A. Male

B. Female

4. MARITAL STATUS

A. Single

B. Married

5. HEALTH INSURANCE-EYECARE

A. Yes

B. No

6. OCCUPATION

_____

7. FAMILY INCOME / YEAR

A. Under

B. 5,000 - 9,999

C. 10,000 - 14,999

D. 15,000 - 19,999

E. 20,000 - 24,999

F. 25,000 - 34,999

G. 35,000 - 49,999

H. 50,000 and over

8. ADDRESS: CITY / STATE/ZIP CODE

_____

METHODS

The survey was comprised of seven questions with each question representing an area of practice. The areas included contact lenses, repairing and replacing prescriptions, ocular pathology, fashion eyewear changes, vision therapy (vision therapy is the treatment necessary for a child's reading or learning problem, so this question could also be classified as pediatric optometry or a learning disability), prescription changes, and comprehensive vision exams.

The sample was composed of the first 100 subjects in a shopping mall whom were willing to fill out the multiple-choice questionaire (FIGURE 1.) and socio-economic profile (FIGURE 2). The subjects were asked to select one of the displayed advertisements for each of the simulated optometric situations. Each example of the different medias were explained to the subject prior to filling out the survey. It was stressed for each question, the subject try to put themselves into the particular situation and then decide which type of media they find most beneficial.

The advertisements were divided into six catergories:

A.) Newspaper ads coming from solo, partnership, and group practices. These ads emphasize the optometrist's services provided, specializations, and quality comprehensive vision care.

B.) Newspaper ads coming from commercial optometric establishments. These ads included coupons, price quotations, package deals,and 2-for-1 types of advertisements.

C.) Yellow page ads coming from optometrist's with private practices. Professionalism, optometric services, and specializations are stressed in this group of advertisements.

D.) Yellow page ads coming from commercial optometric establishments. The impression from these ads is fast, complete eye exams at a low cost. Fashion frames, free adjustments and simple repairs, and filling prescriptions are also called to one's attention. "Glasses in One Hour" is their advertising slogan.

E.) Direct mail flyers coming from a commercial establishment. In this group of colorful advertisements cost was the highlighted area, with numerous price listings for eyeglasses and contact lenses. The advertising slogan mentioned is "The Cost of Quality Eyecare Isn't Out of Sight..." .

F.) A direct mail pamphlet coming from a private partnership practice. Included in this professionally constructed pamphlet are photos of the building, a brief synopsis of each doctor and staff member, and the various services which they offer. The emphasis of the pamphlet is placed on quality, comprehensive vision care. The practice's advertising motto is "Your Total Eye Care Center".

A socio-economic profile was also completed by each subject. The subject was asked to give information pertaining to their age, education level, sex, marital status, health insurance, occupation, family income/year, and residency.

A potential source of bias is introduced by the self-selection in a volunteer sample[6]. In an attempt to reduce bias and to promote response, the survey was given in a casual manner. The subjects were guaranteed confidentiality and were uneducated to the fact the survey was administered by a optometric student.

RESULTS

All socio-economic profile sub-divisions having at least 10% of the sample population were plotted to show relationships between these divisions and the subject's selections on each question.

Contingency table analysis using the Chi-square distribution was performed to identify interactions of age, education level, sex, and income level with subject's responses to the survey questions. These measures of association were considered significant when p was less than or equal to 0.05.

Demographics

The distribution of ages for the subjects were as follows: 14-24 years, 21; 25-44 years, 34; 45-64 years,38; and 65 years and over, 7.

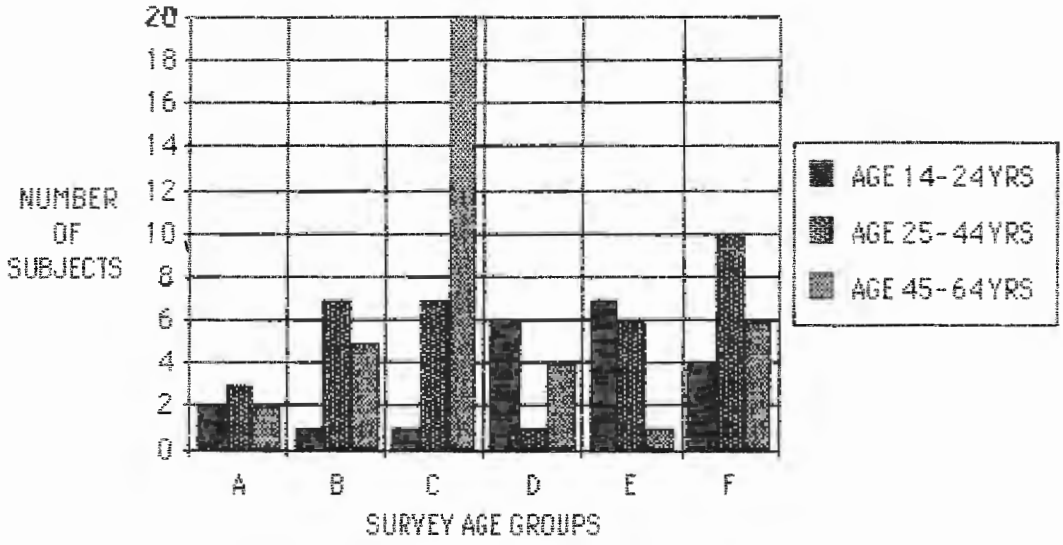
The sample population was on the high end in regard to education level with 53% having four or more years of college. The national percentage (1985) of the population 25 years or older who have completed four of more years of college is 19.4%[7]. Within the sample population, of those 25 years and older, 44% had four or more years of college.

The sample also contained more women than men, 63 to 37, and more people being married than single, 60 to 40.

In the profile for family income per year, the values were uniformly spread between $5,000 and $50,000 with the $20,000-$25,000 bracket being the mean, median, and mode.

GRAPHS

QUESTION 1 . CONTACT LENSES



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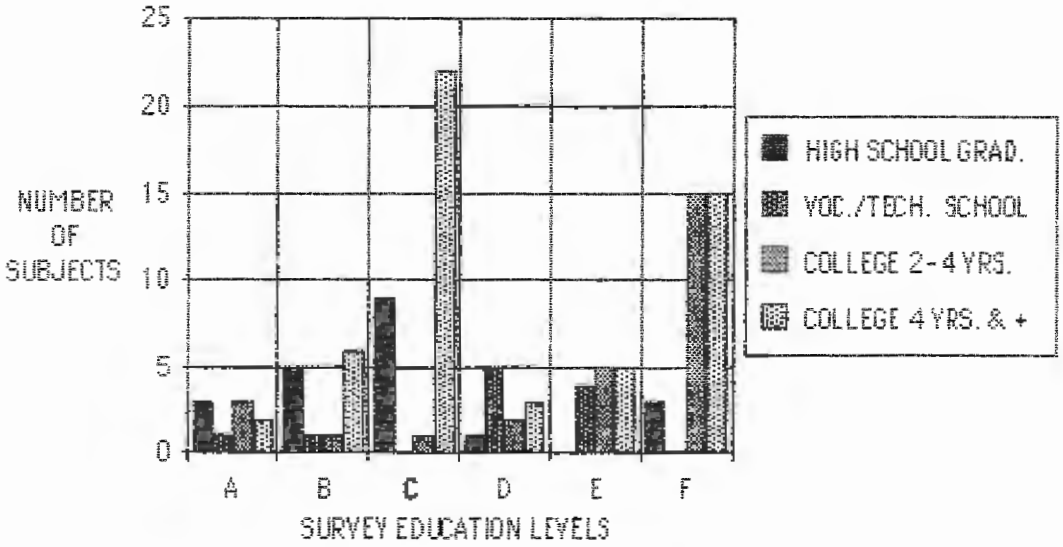

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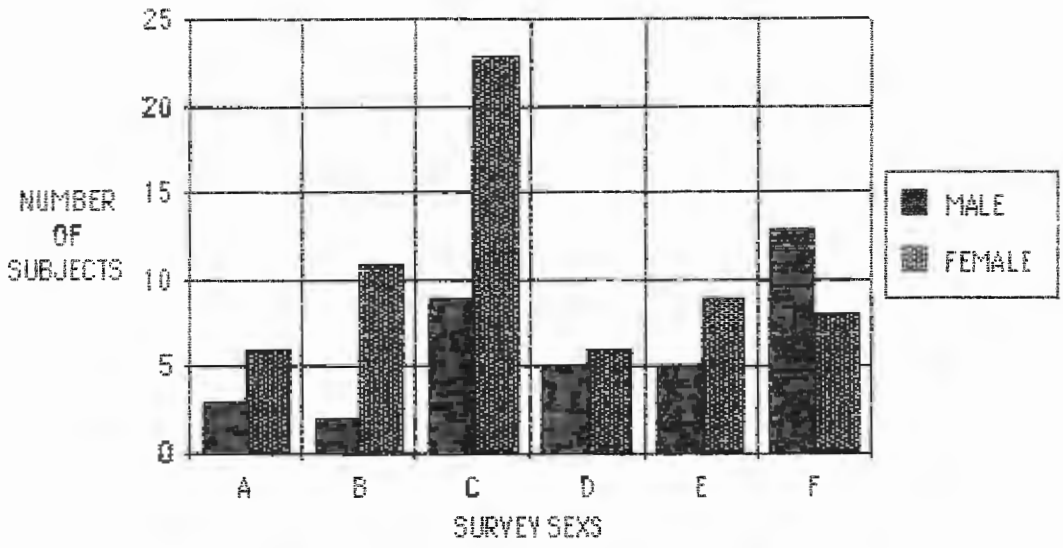

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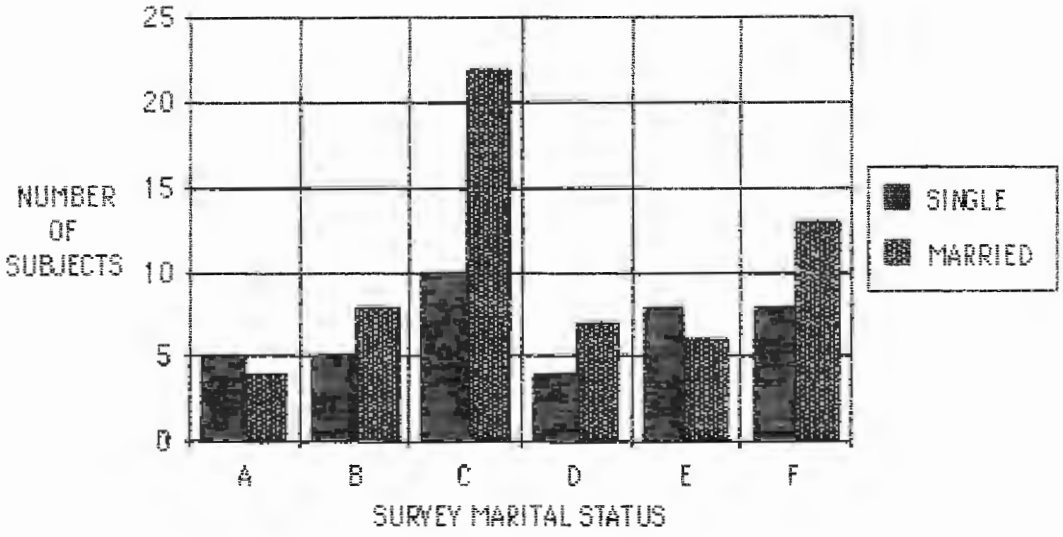

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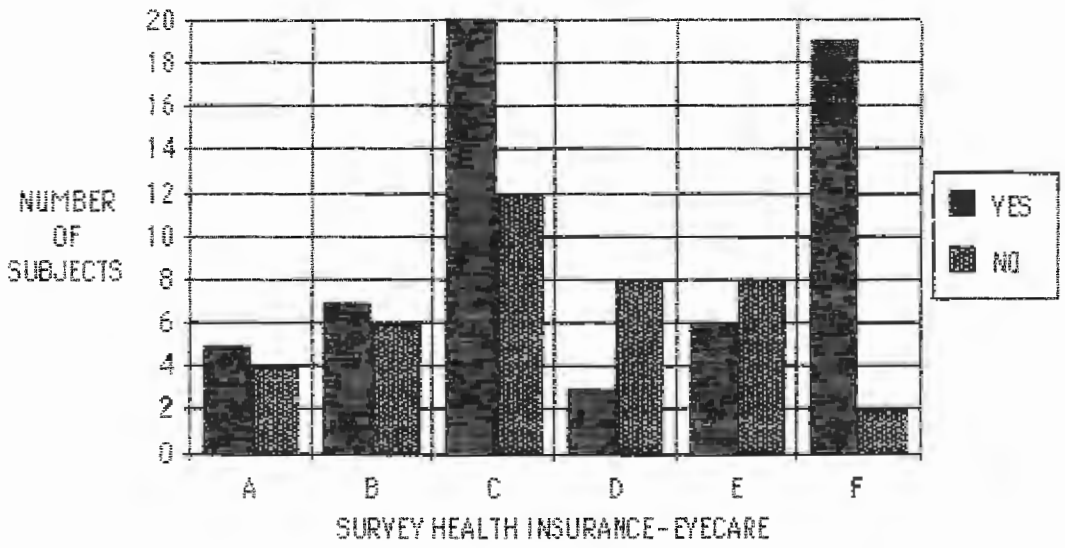

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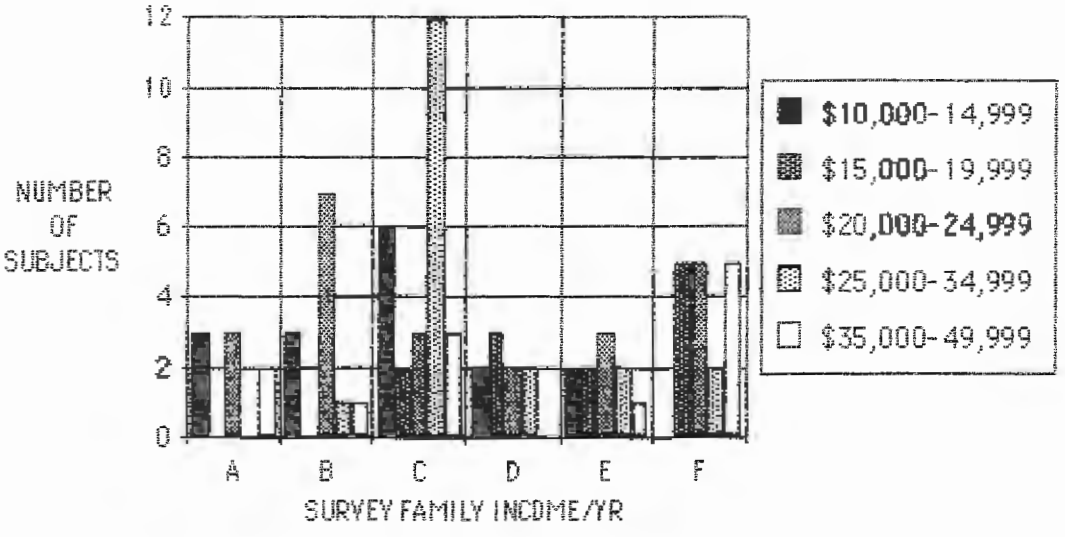

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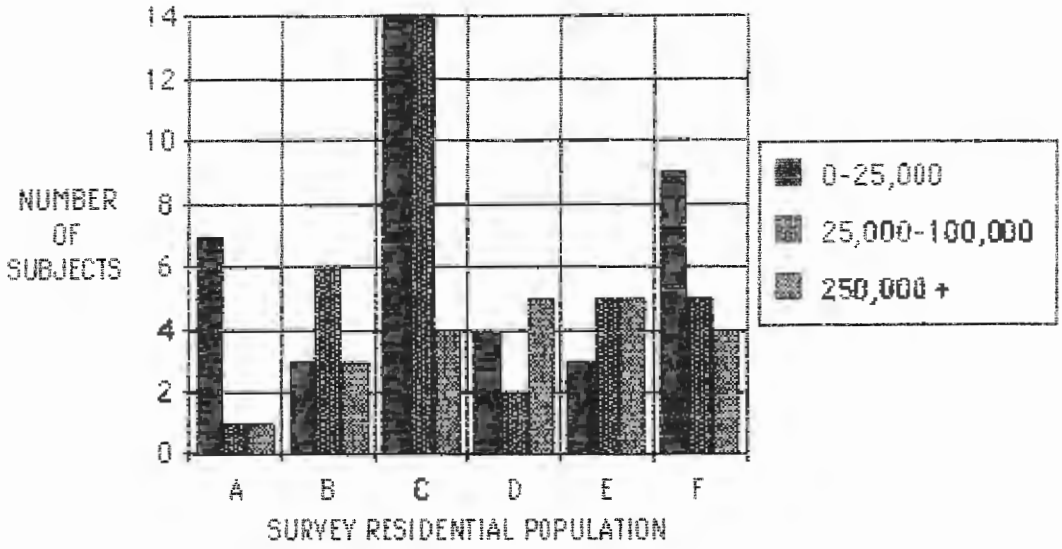

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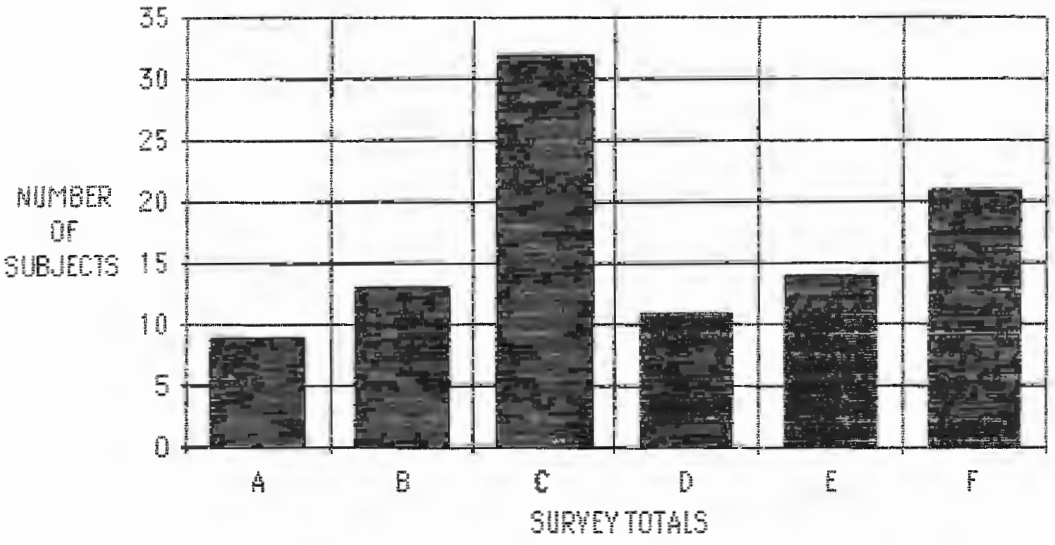
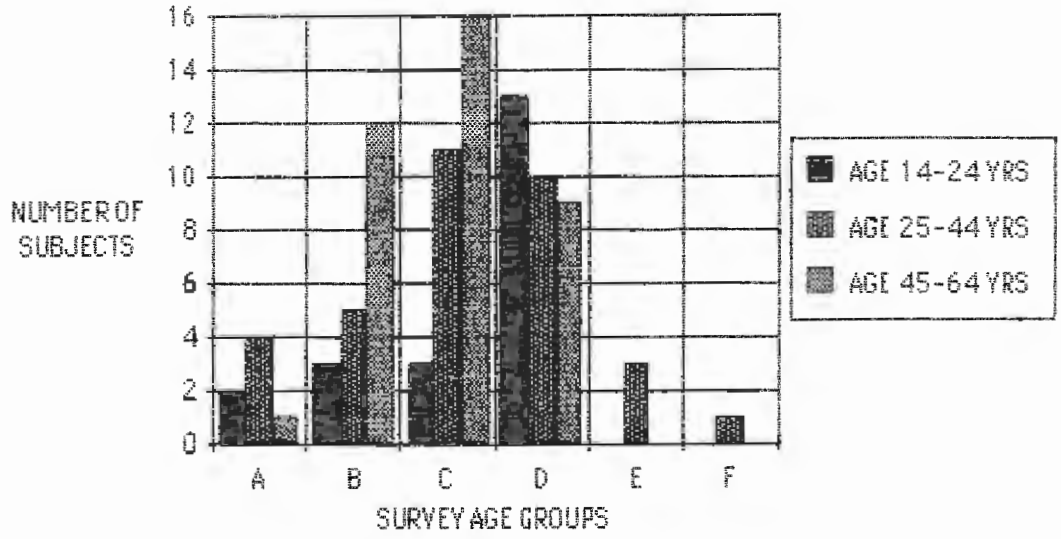


QUESTION 2 : REPLACE/REPAIR Rx



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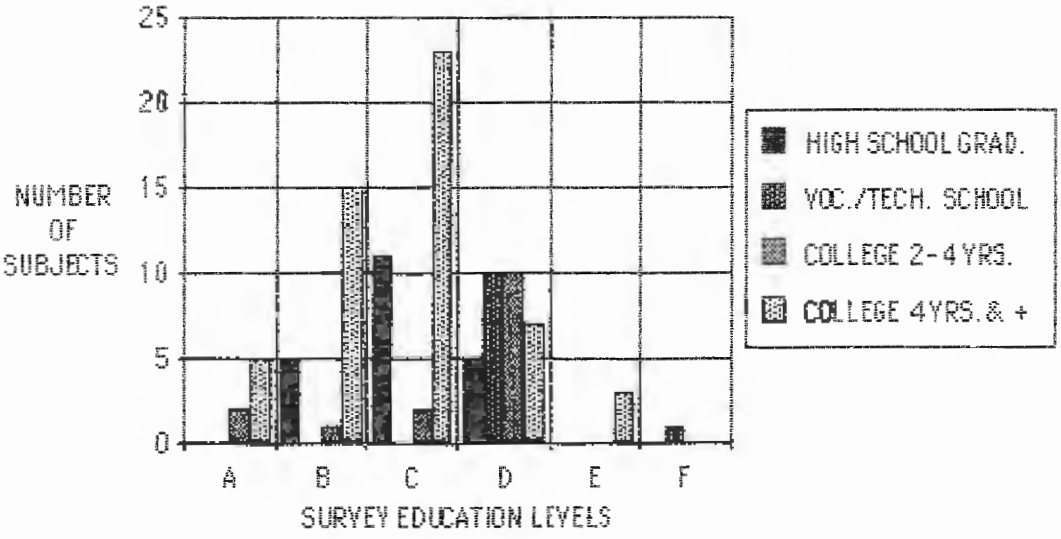

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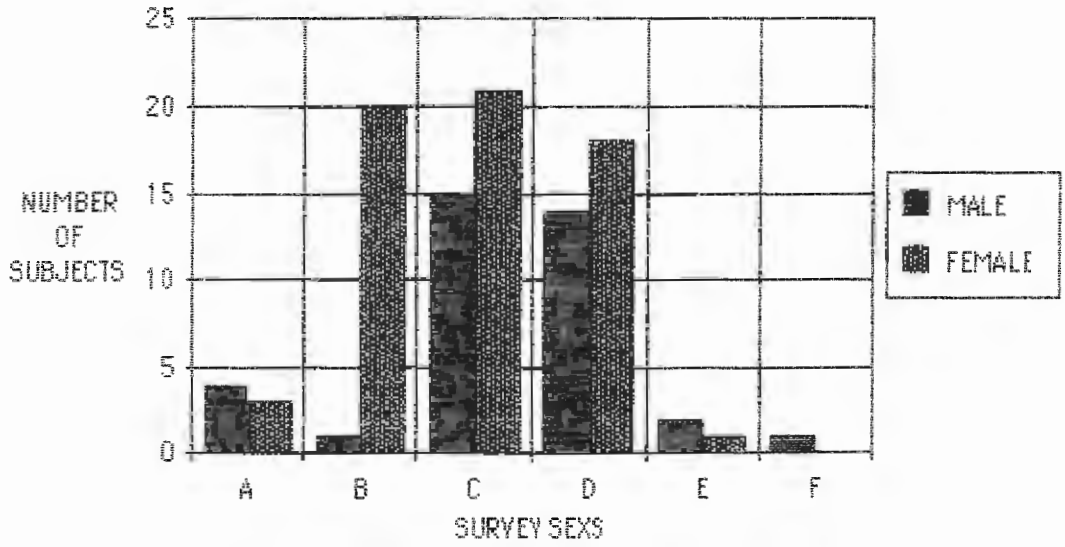

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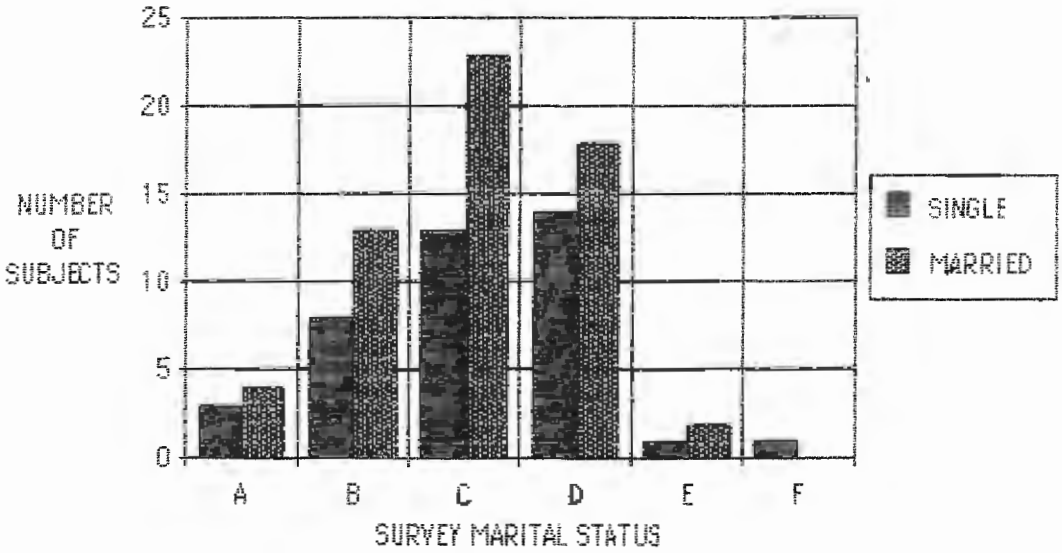

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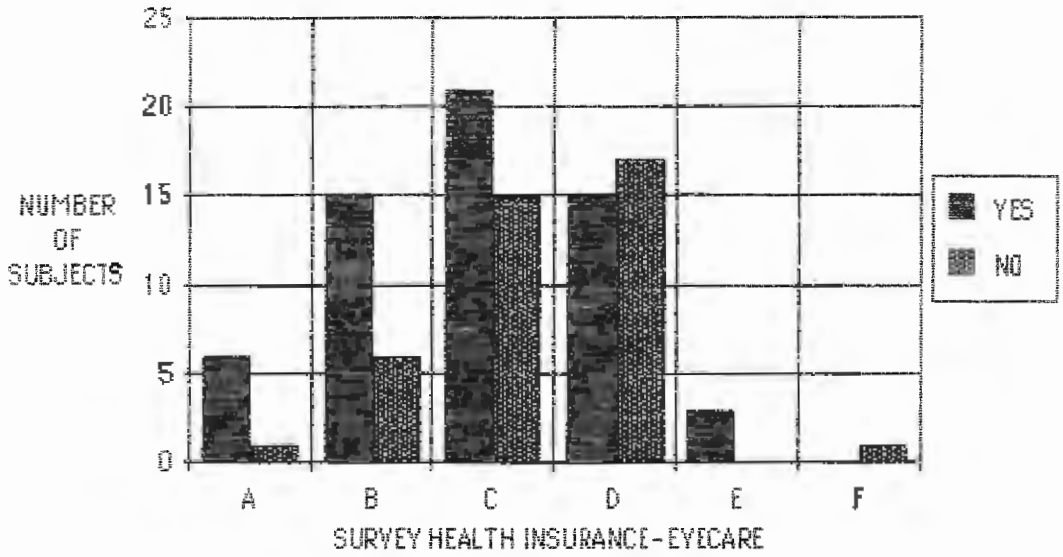

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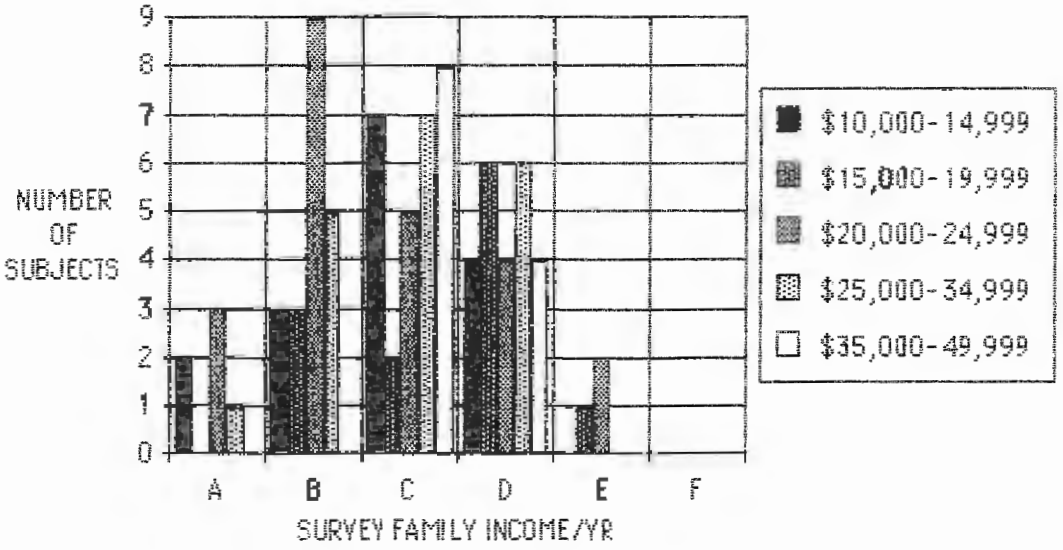

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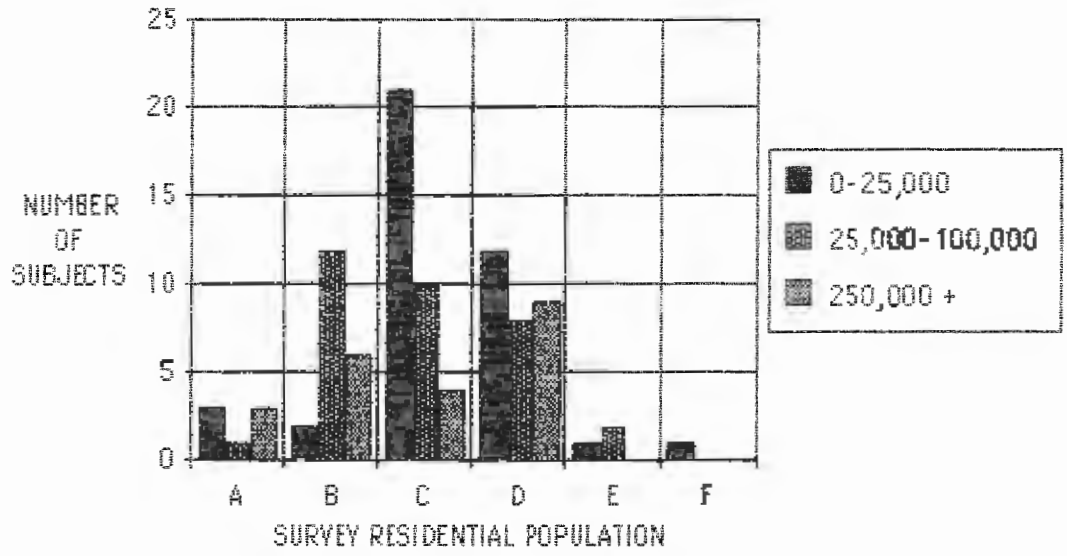

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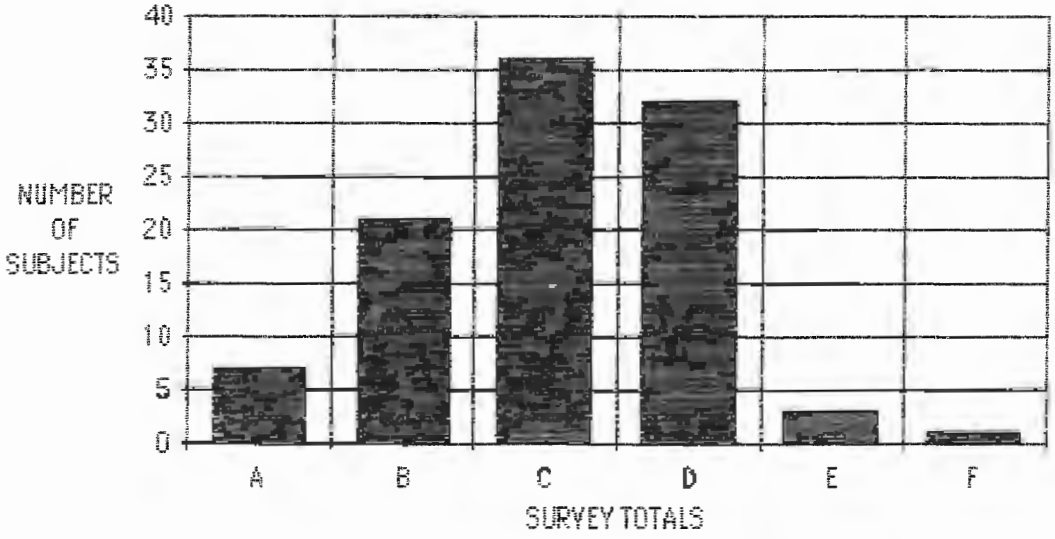

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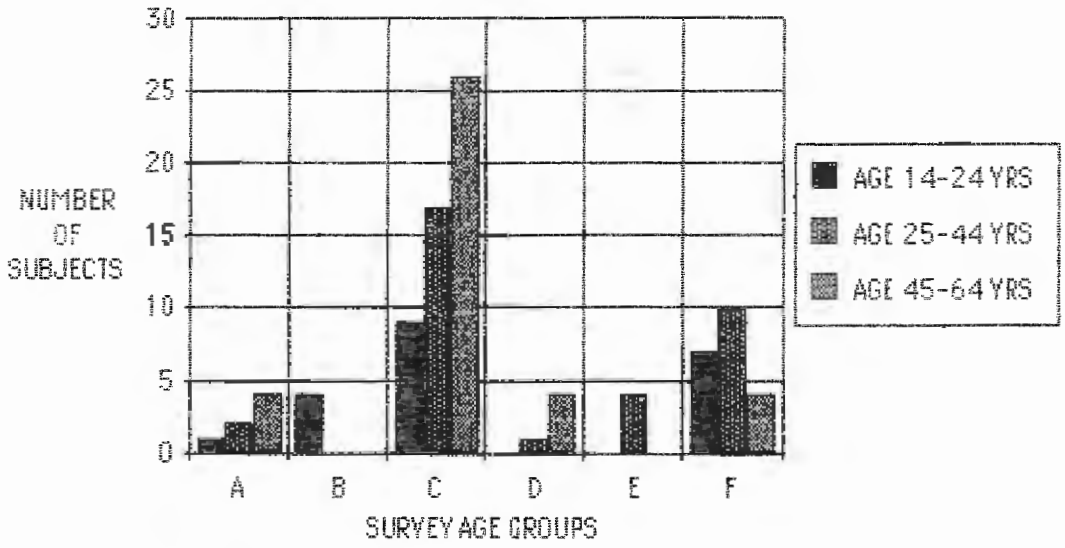

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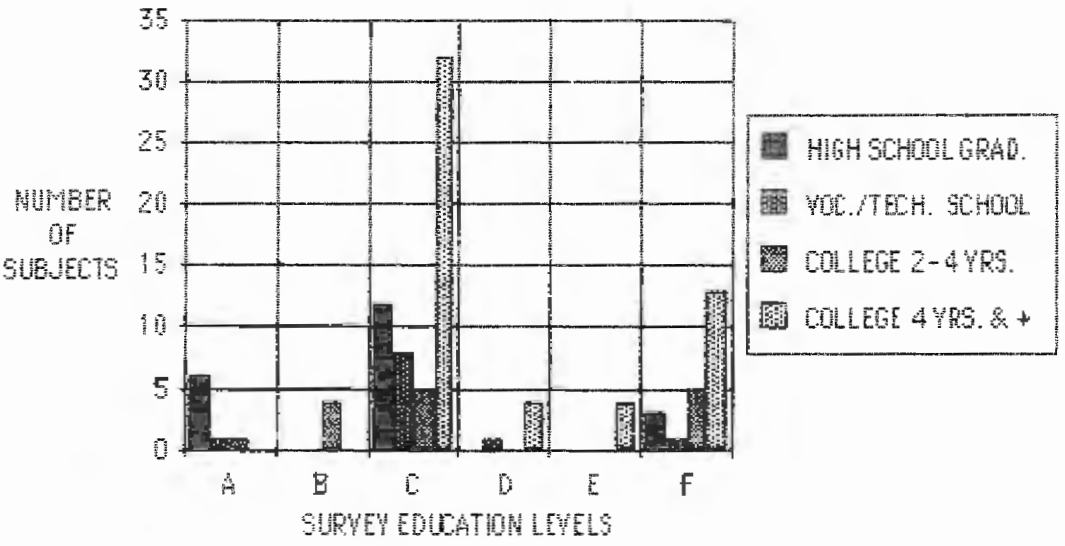

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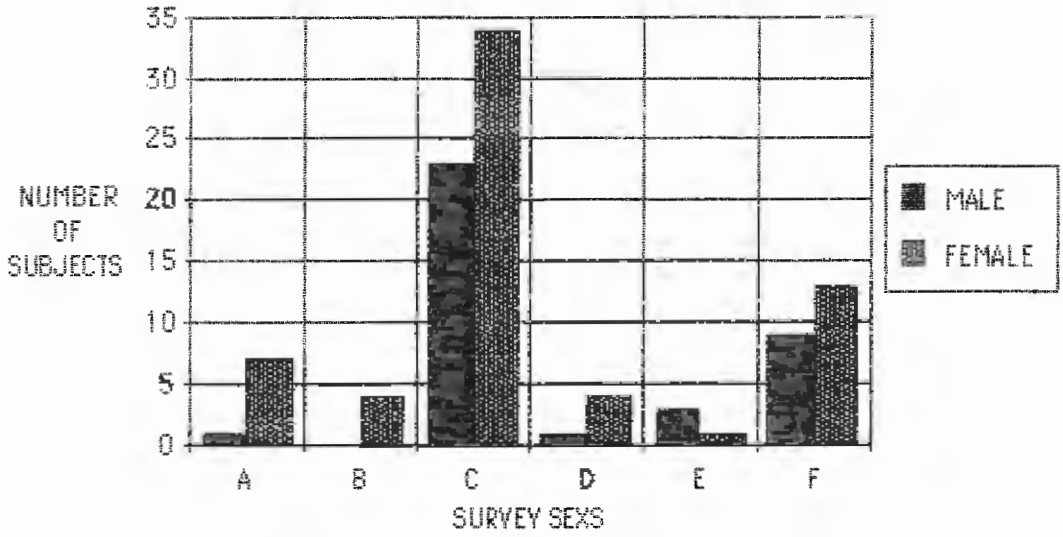

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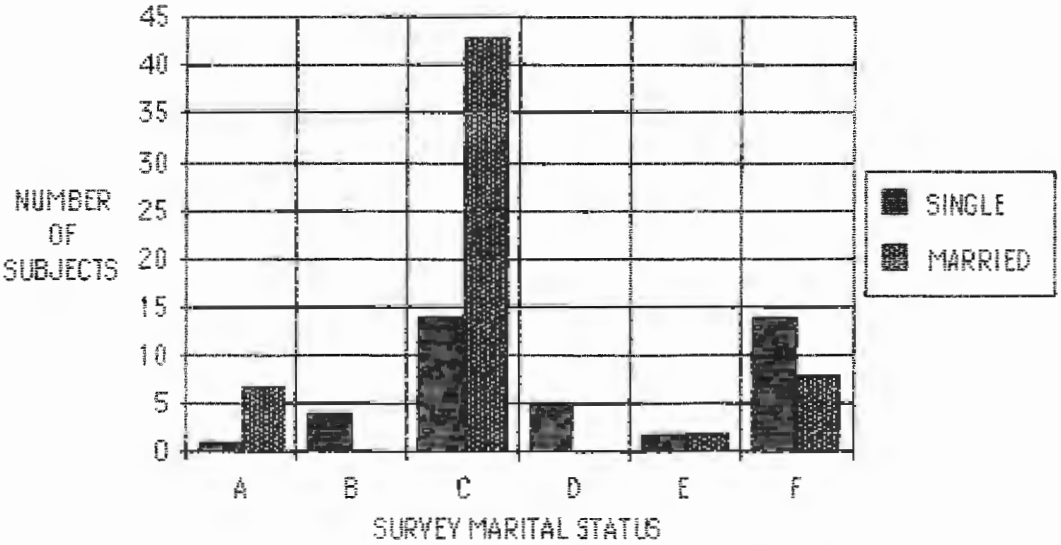

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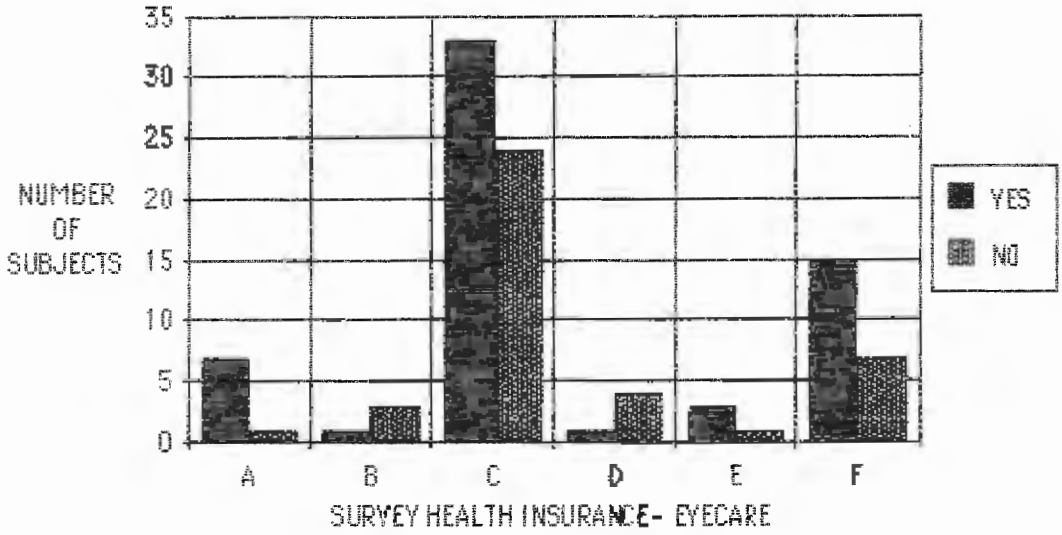

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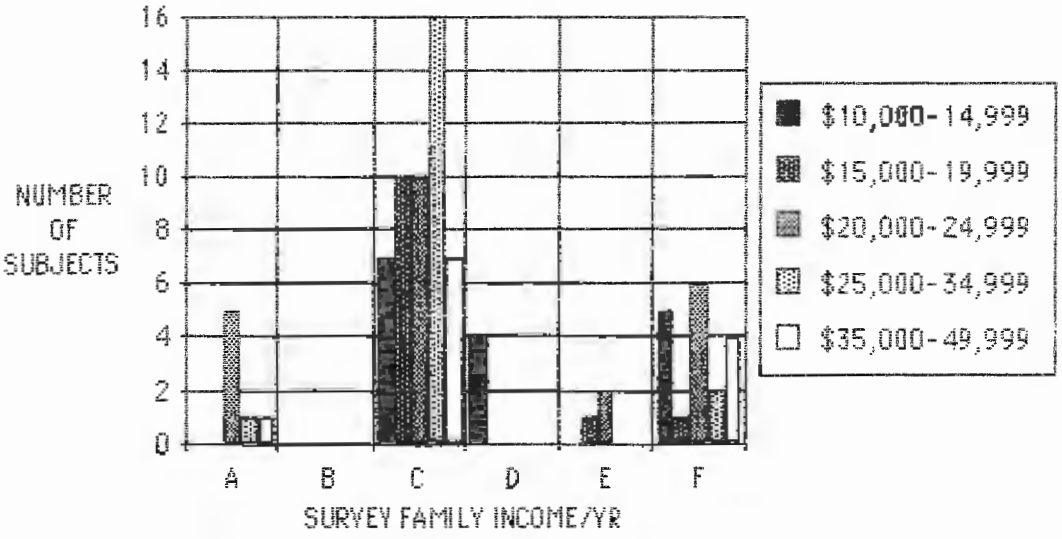

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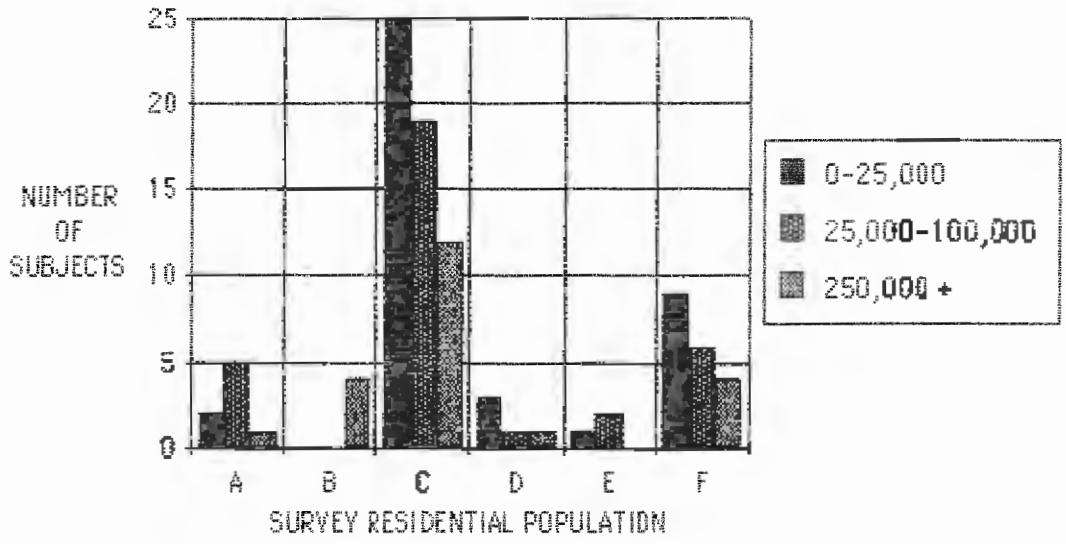

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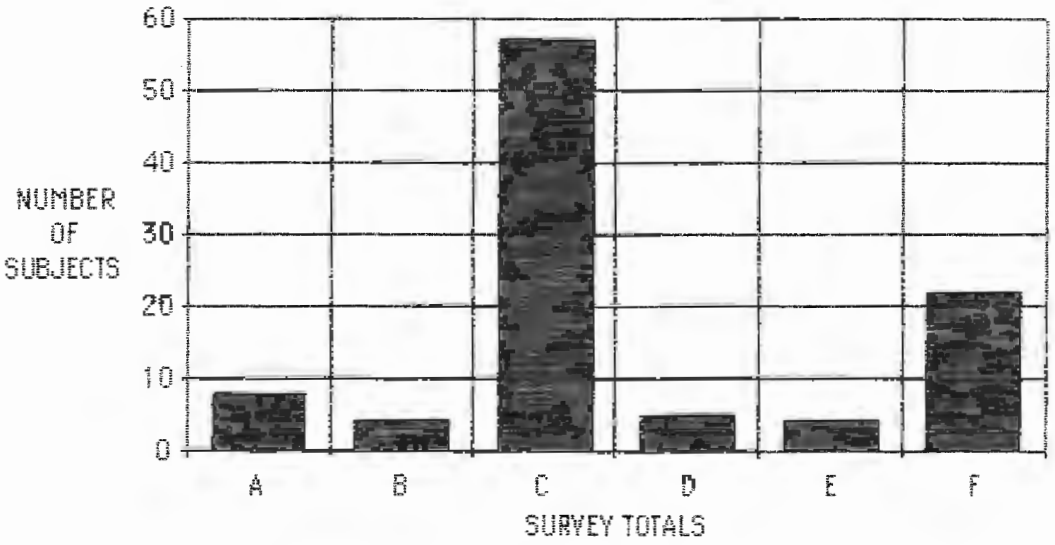
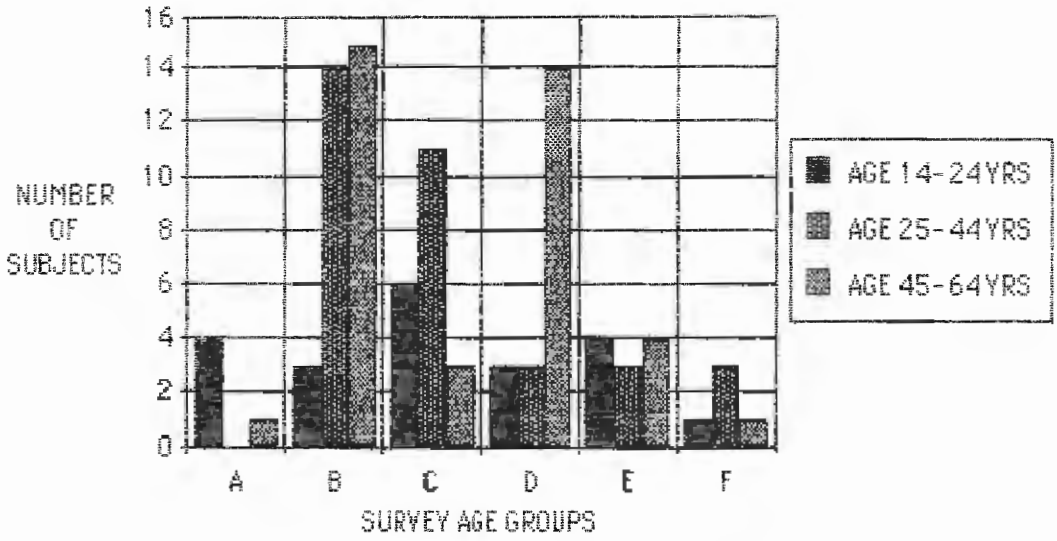


QUESTION 4 FASHION CHANGE



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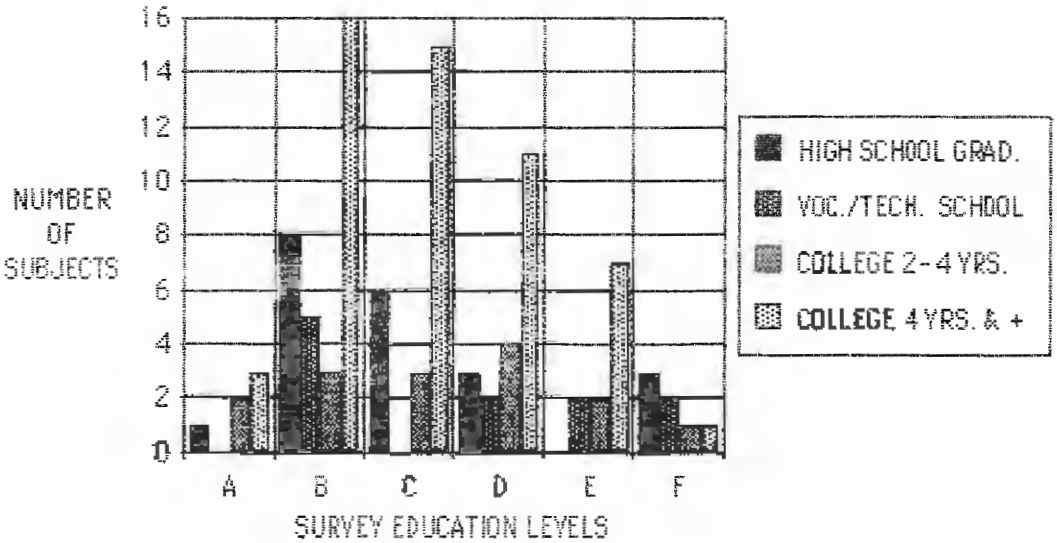

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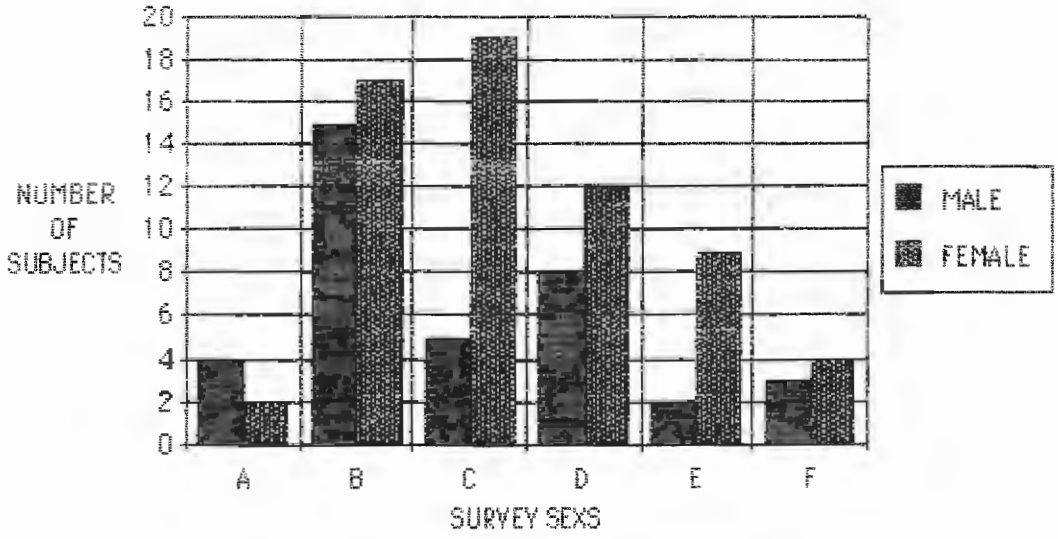
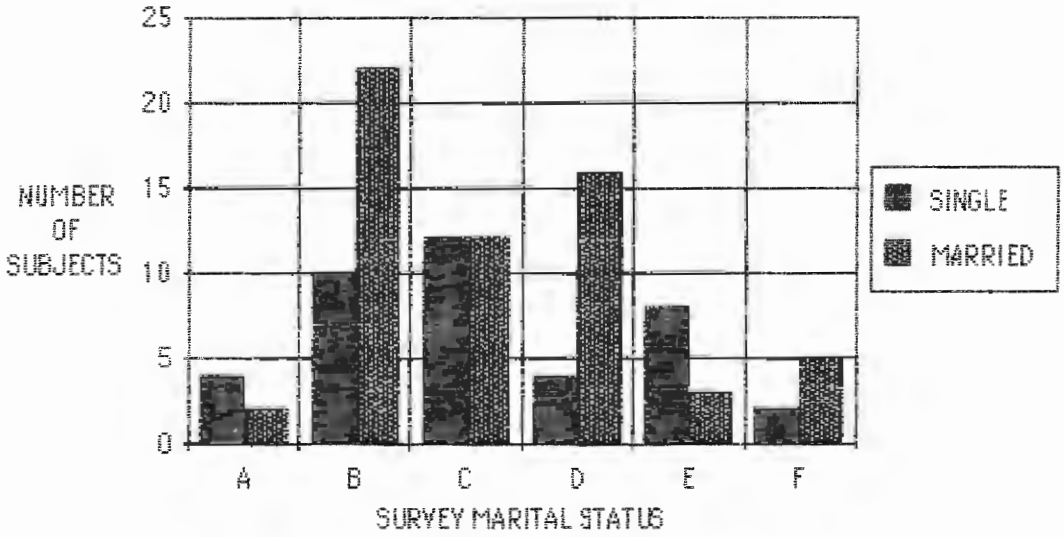


QUESTION 4 : FASHION CHANGE



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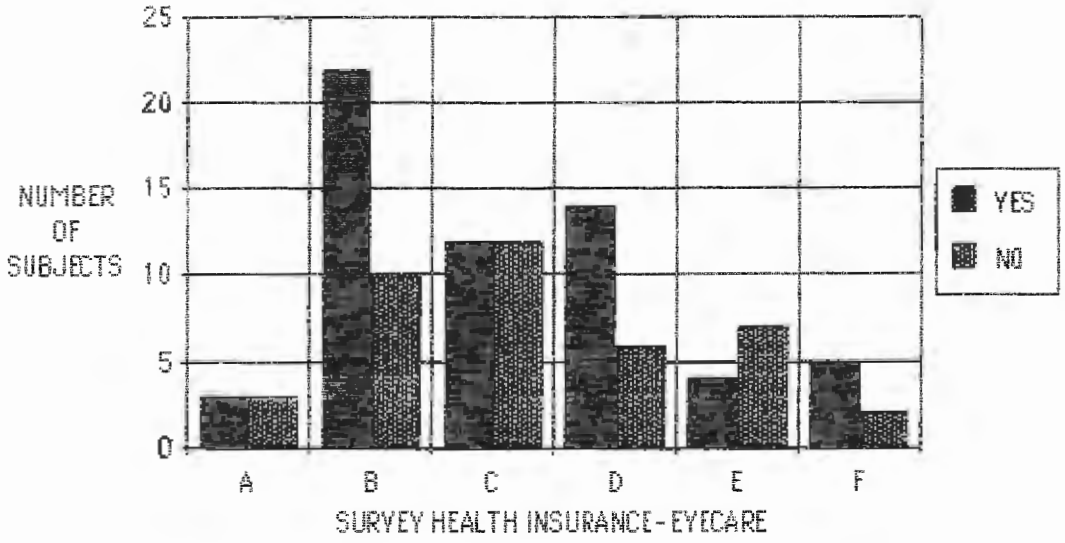

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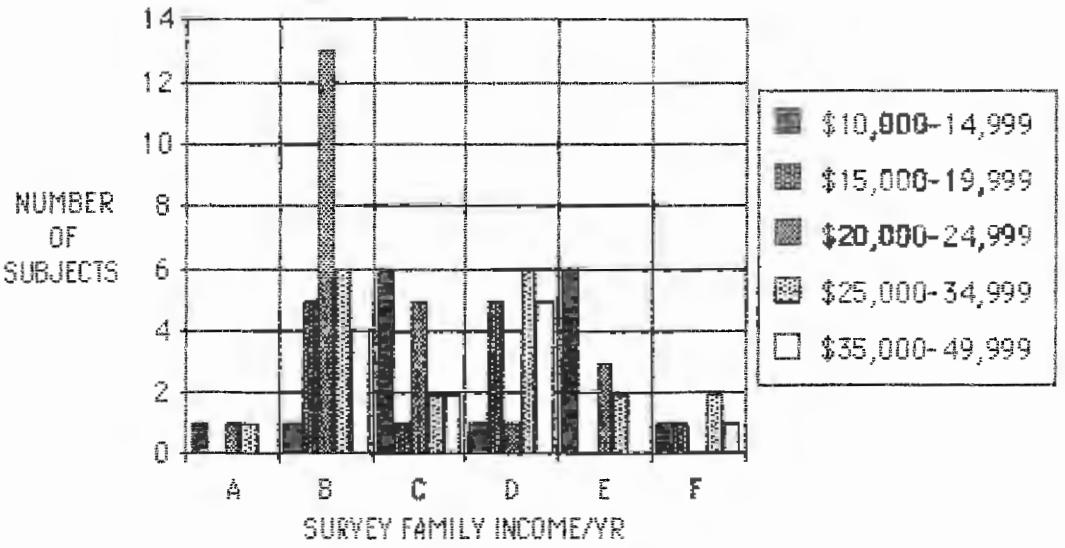

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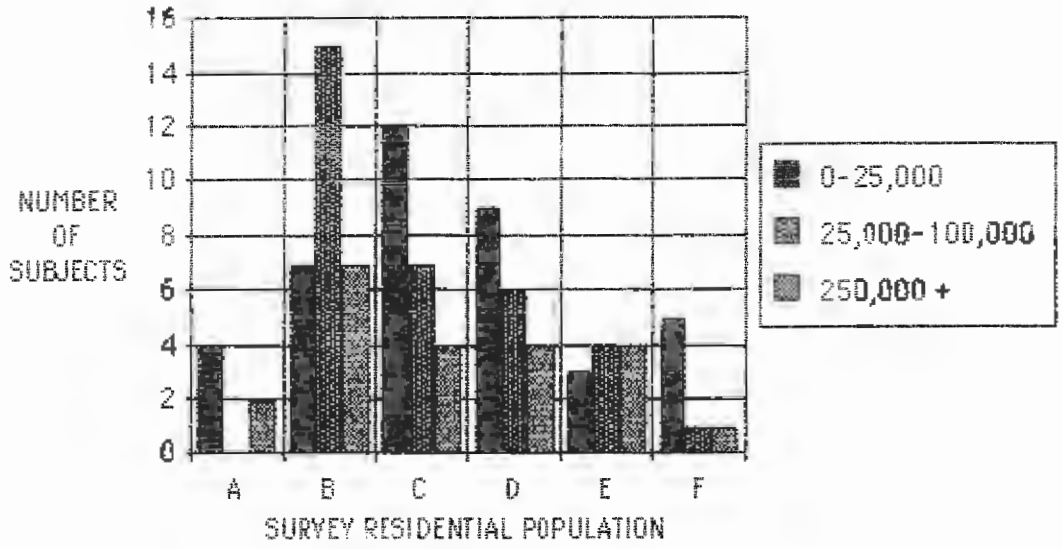

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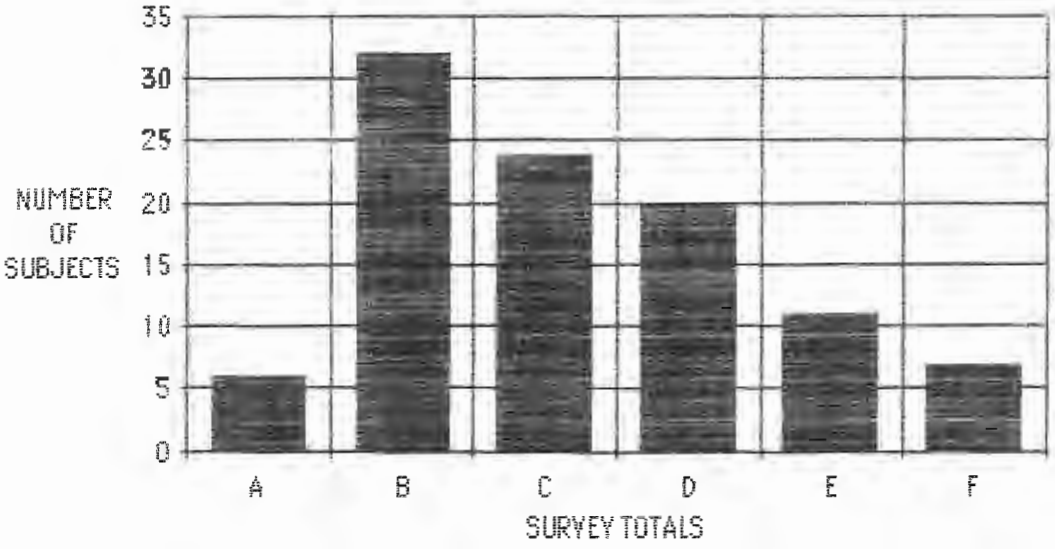

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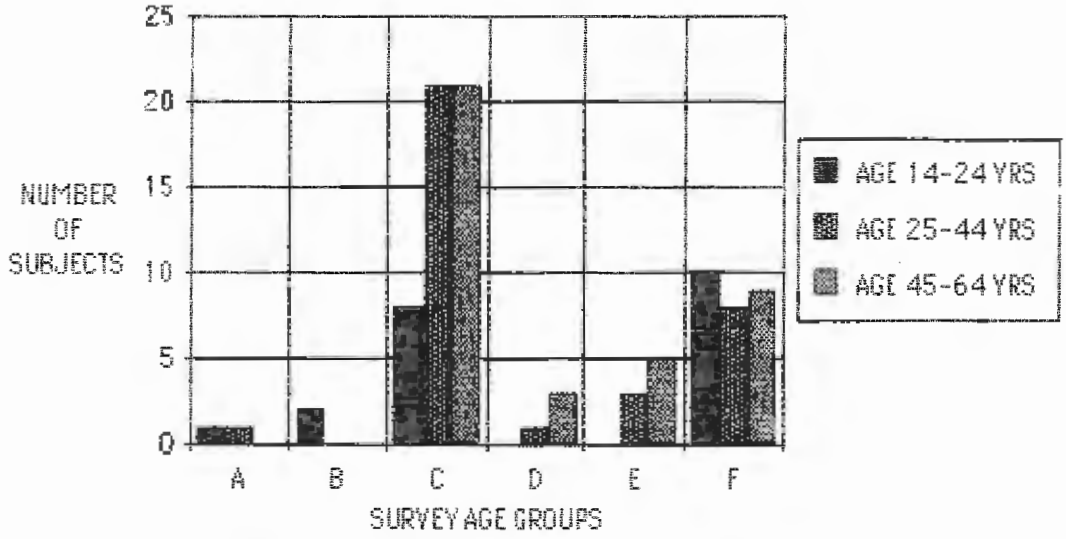

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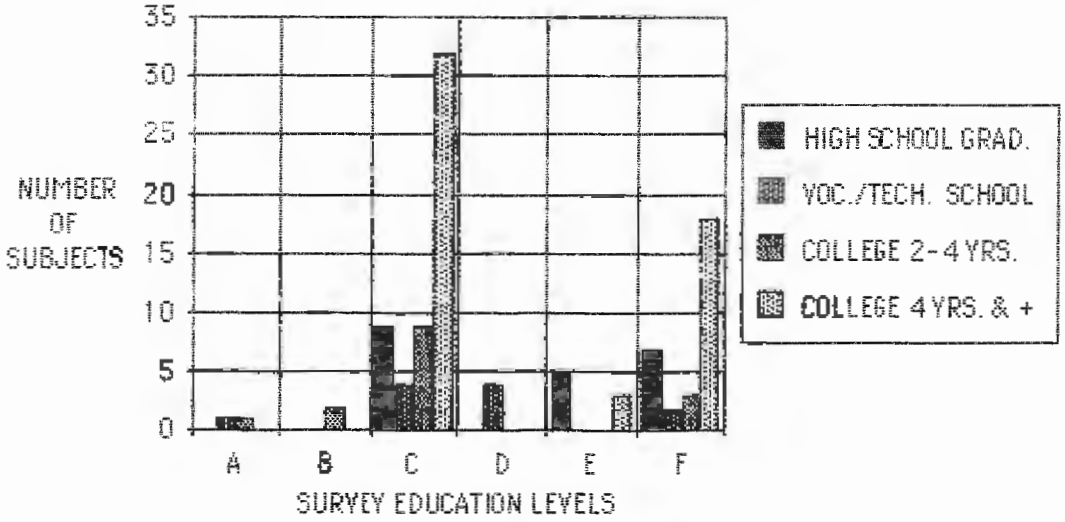

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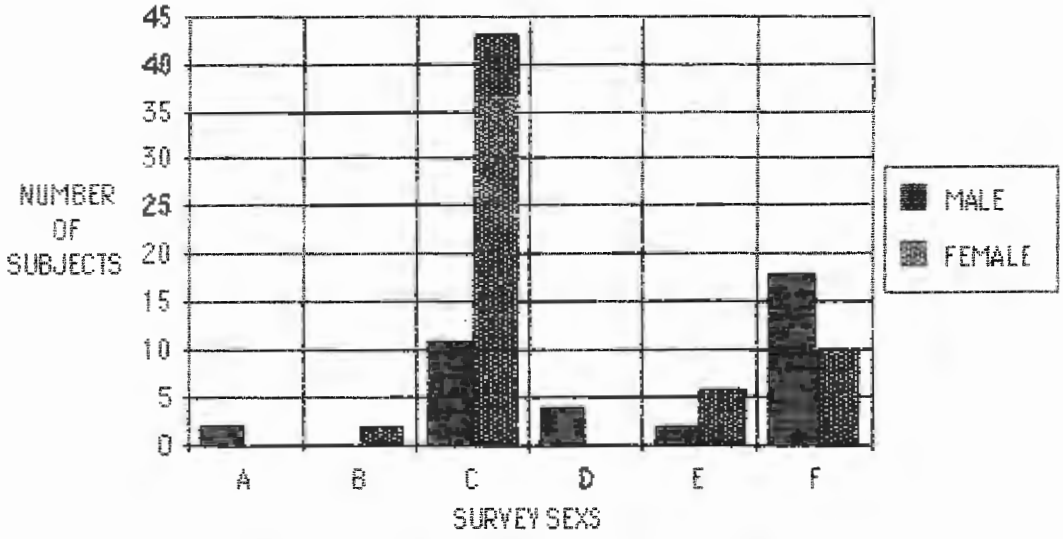

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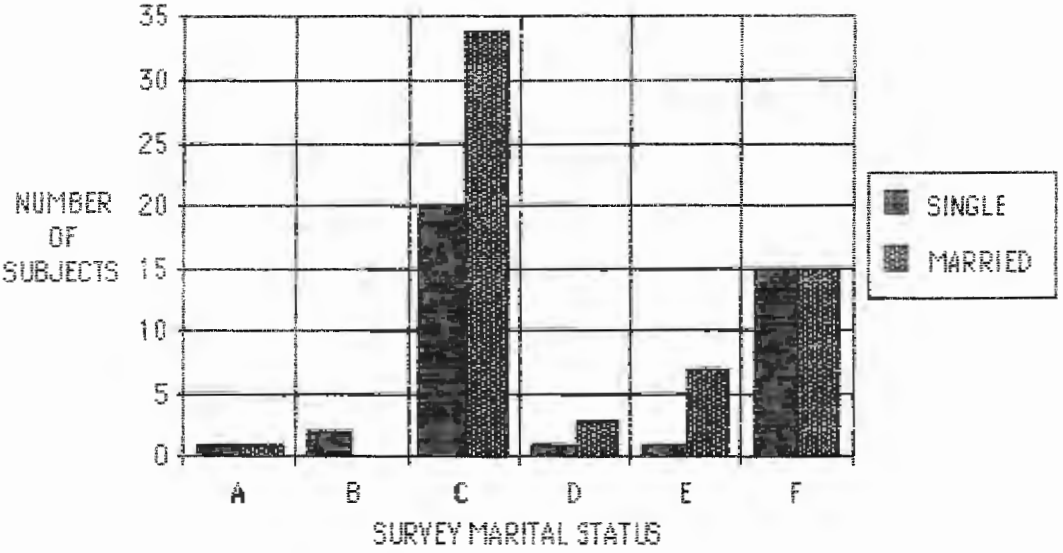

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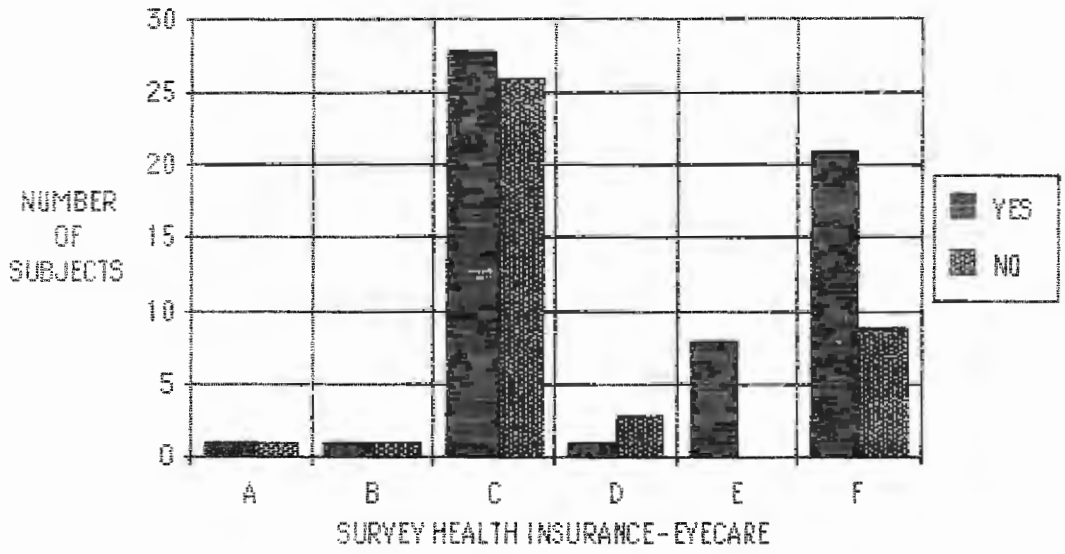

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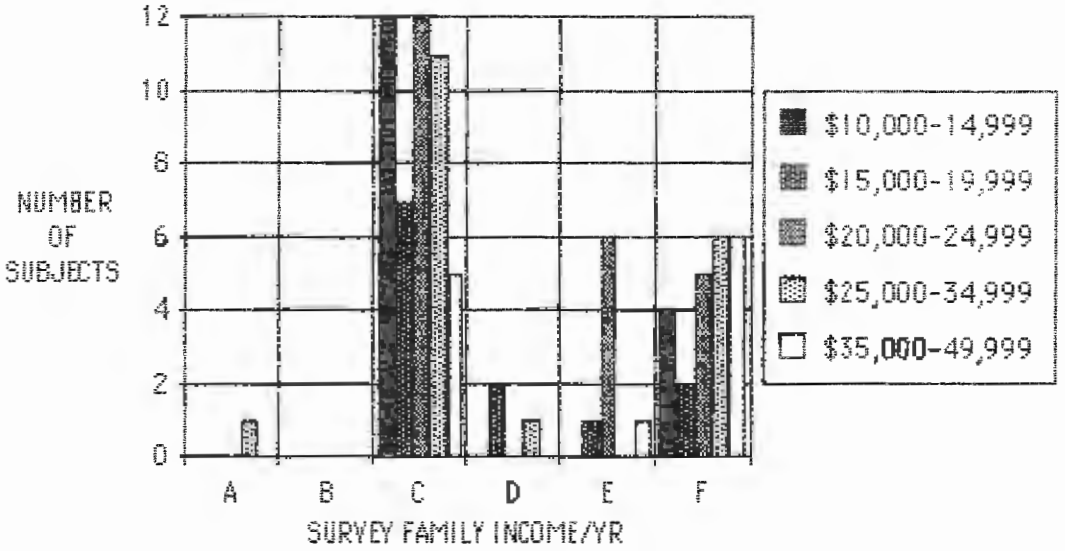

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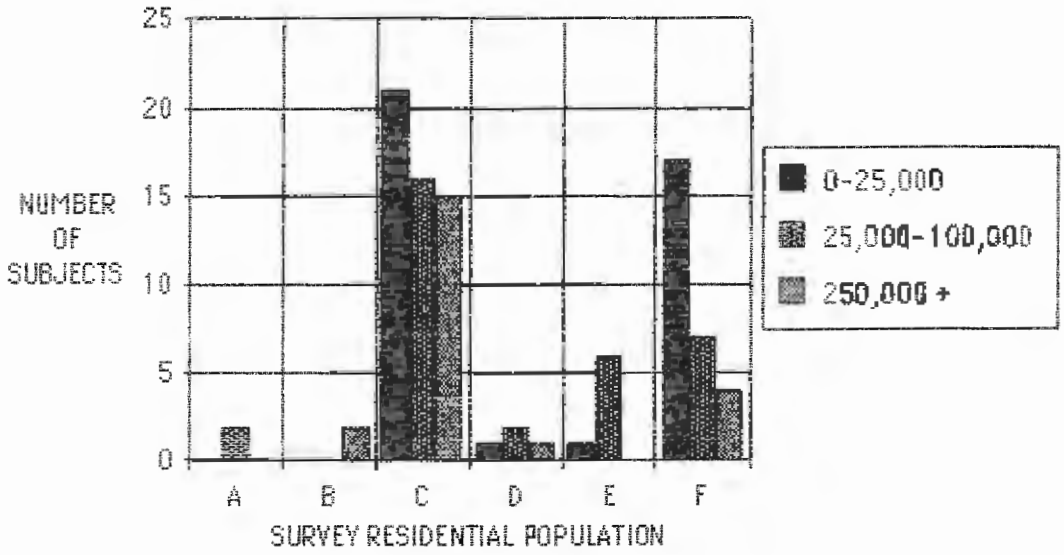
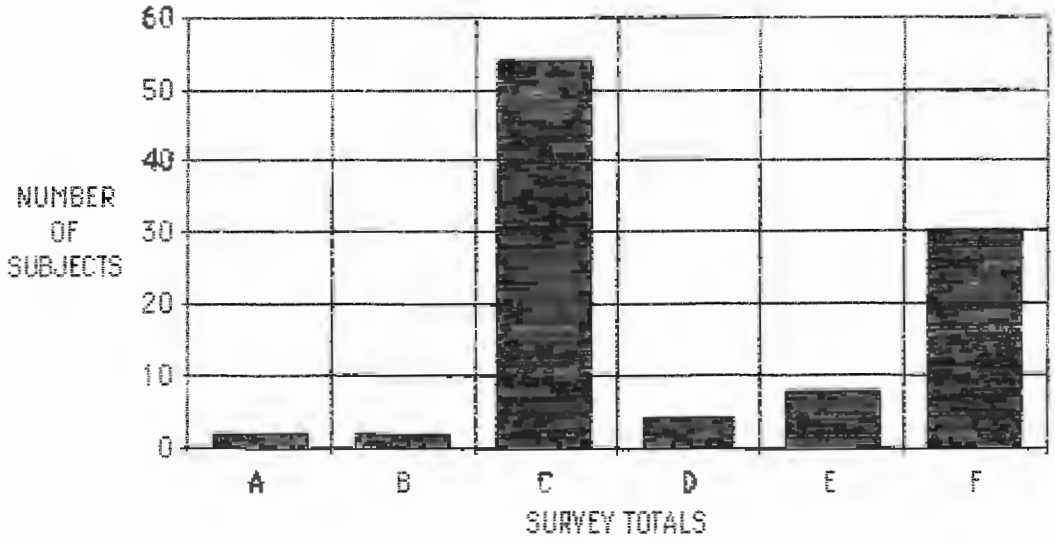
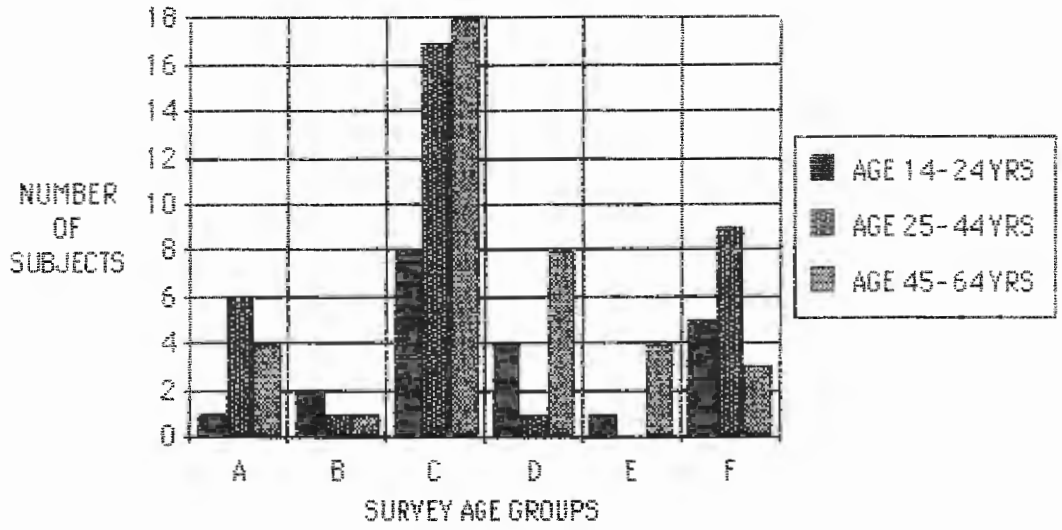


QUESTION 5 : VISION THERAPY



QUESTION 6 : PRESCRIPTION CHANGE



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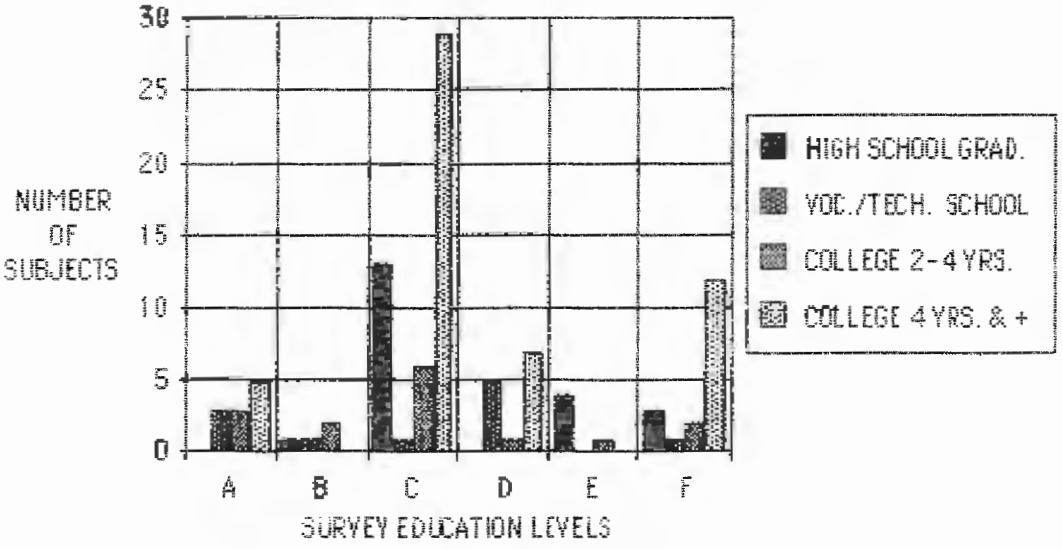

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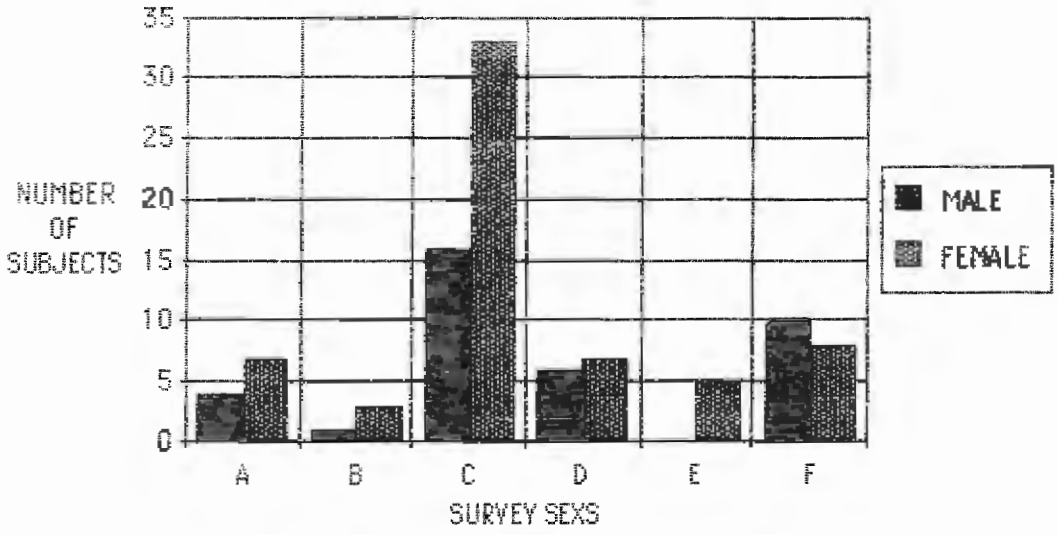

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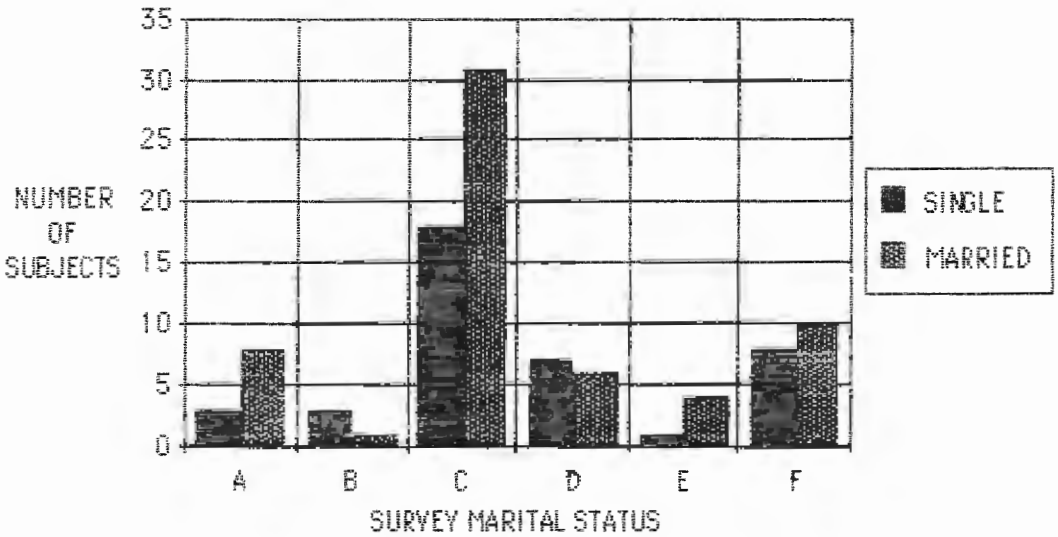

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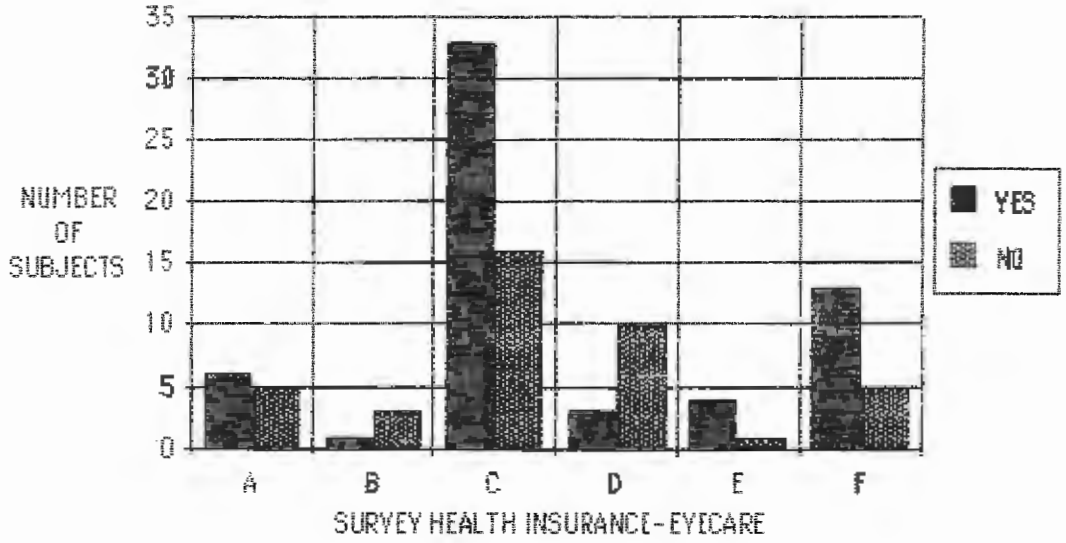

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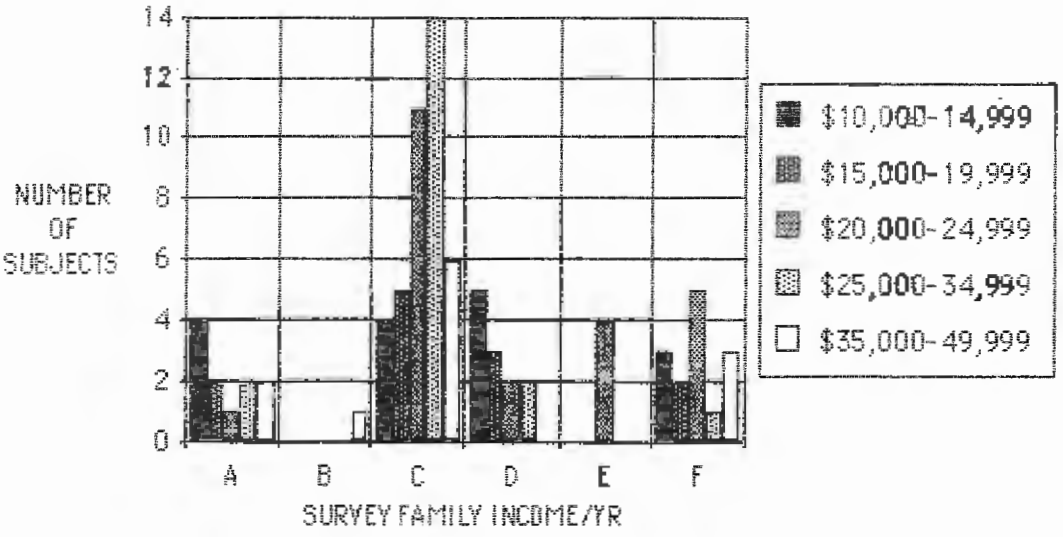

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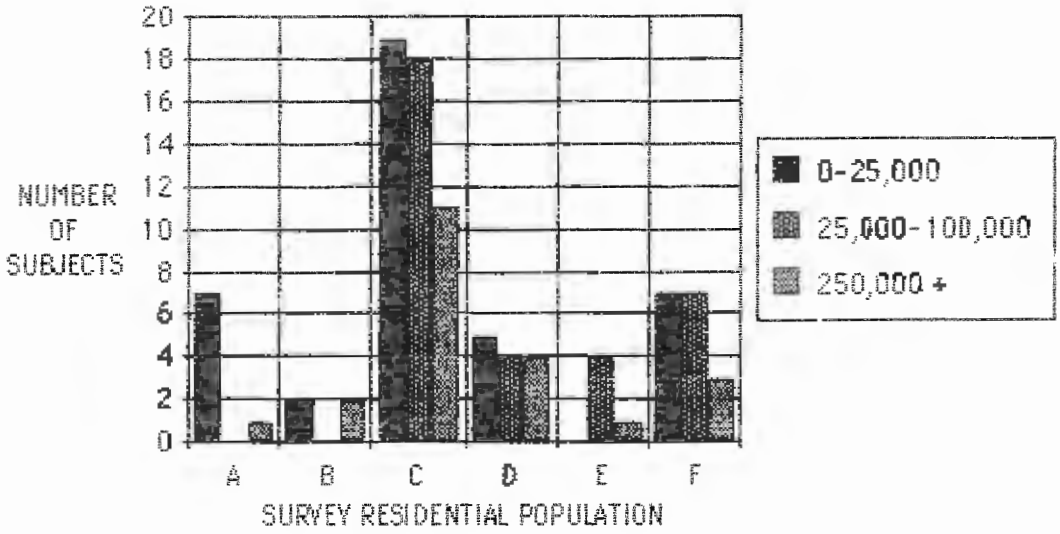

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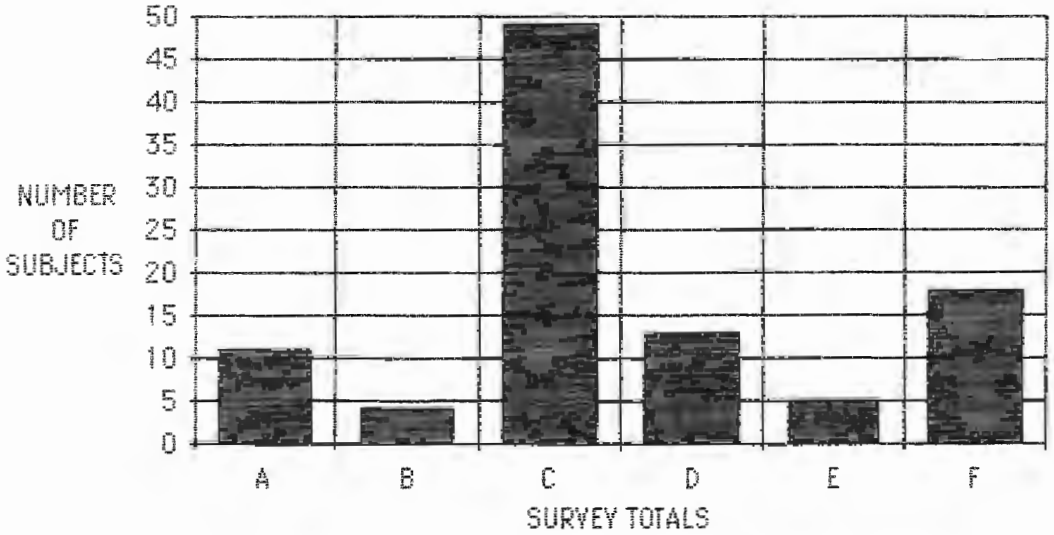
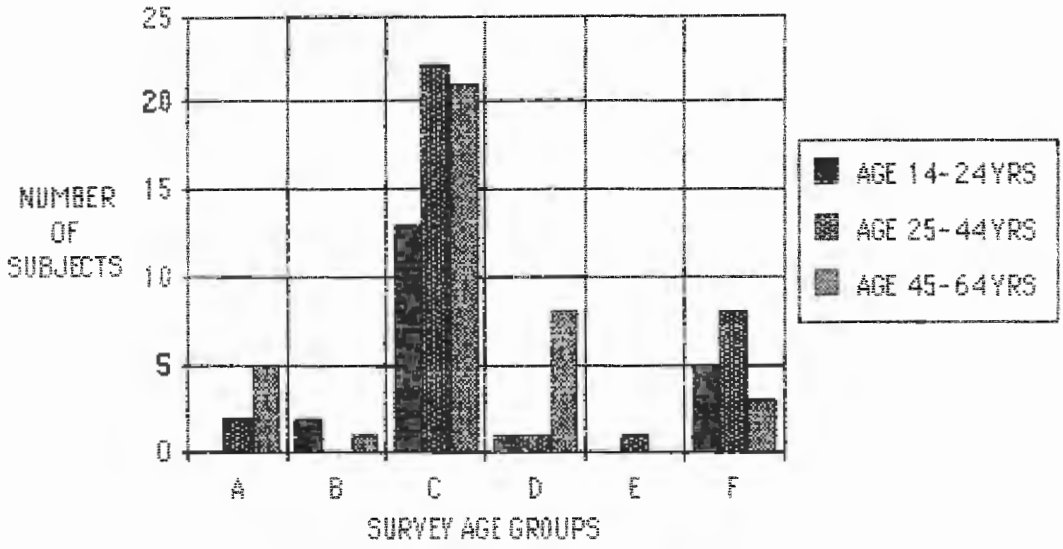


QUESTION 7 : VISION EXAM



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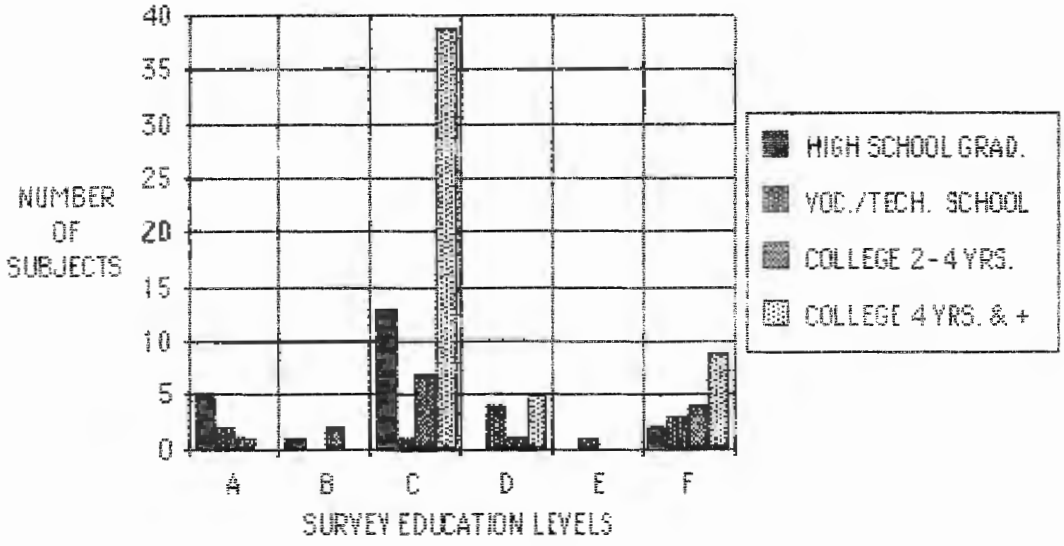
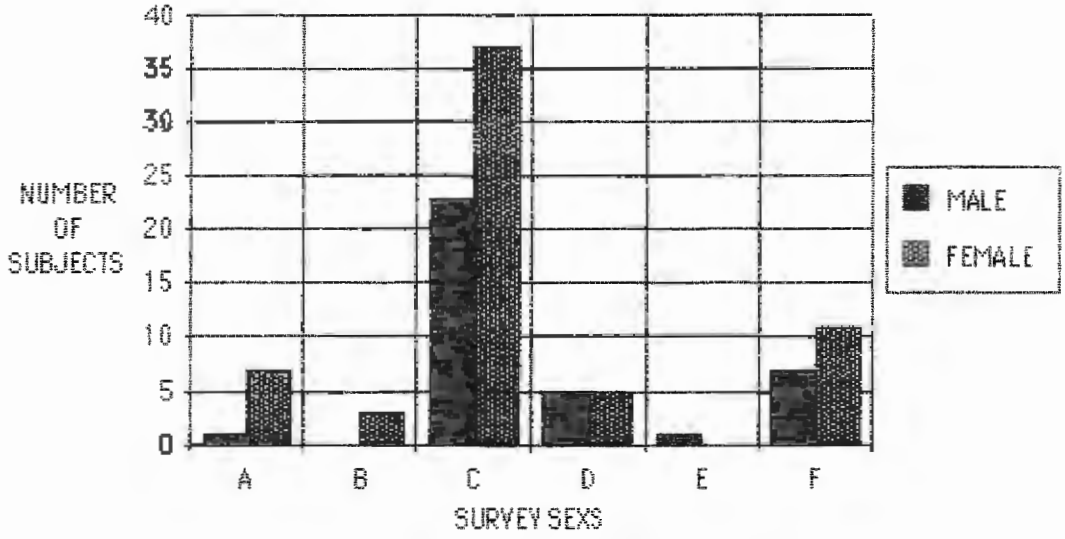
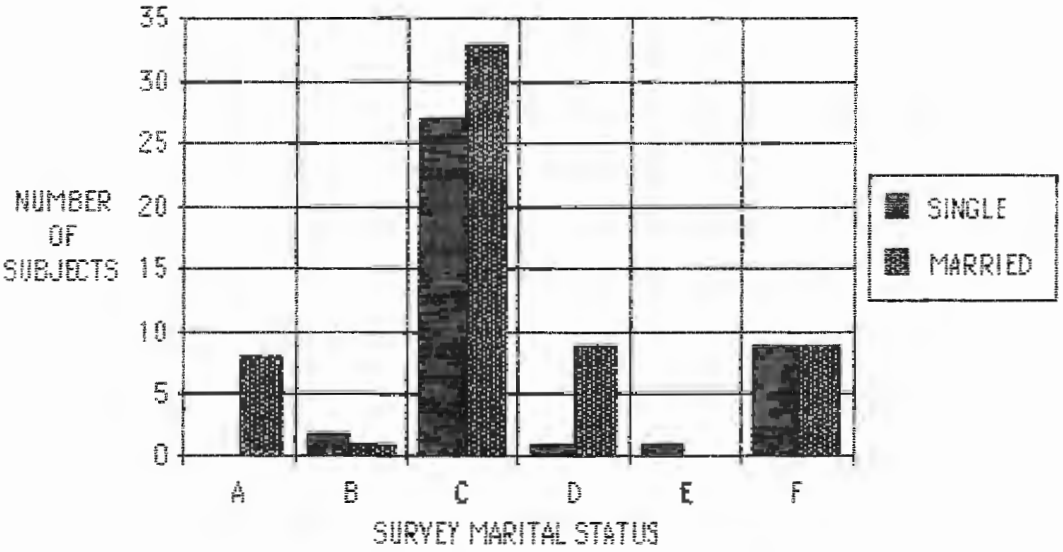


QUESTION 7 : VISION EXAM



QUESTION 7 : VISION EXAM



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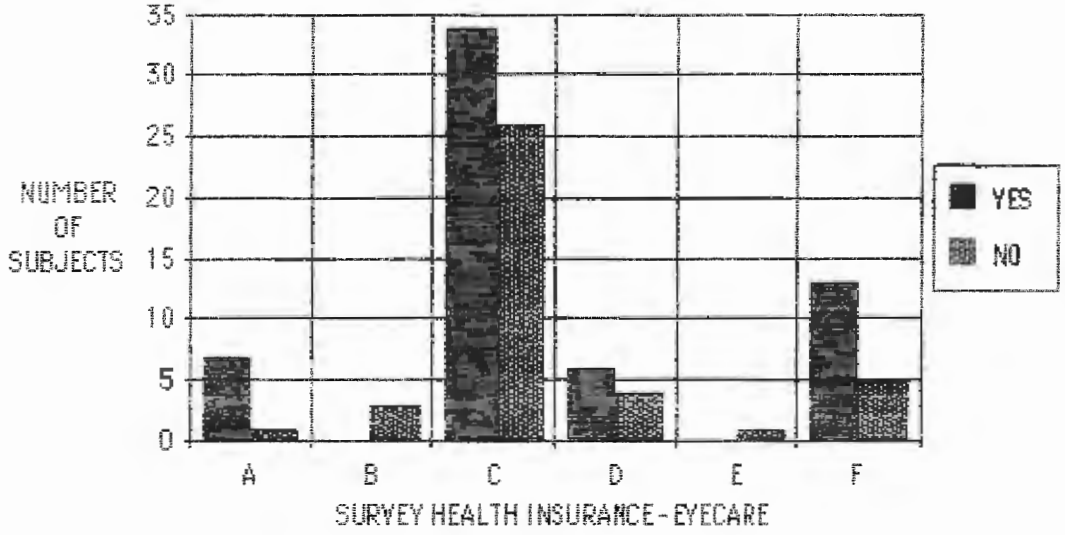

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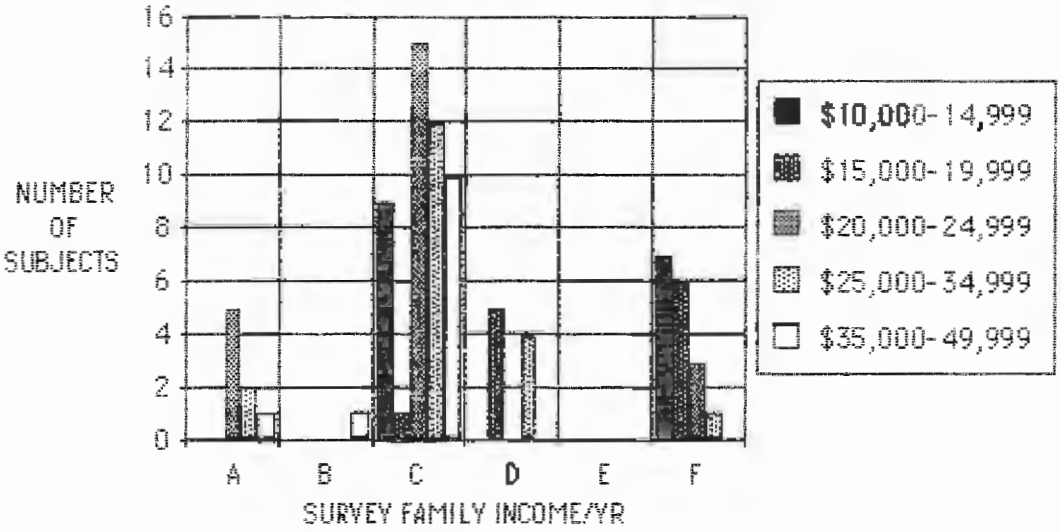
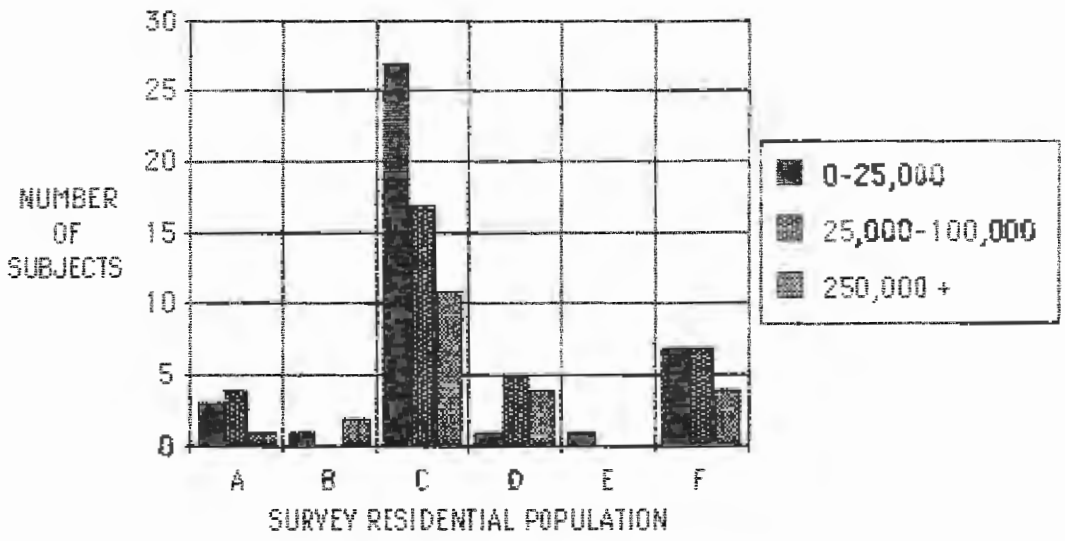
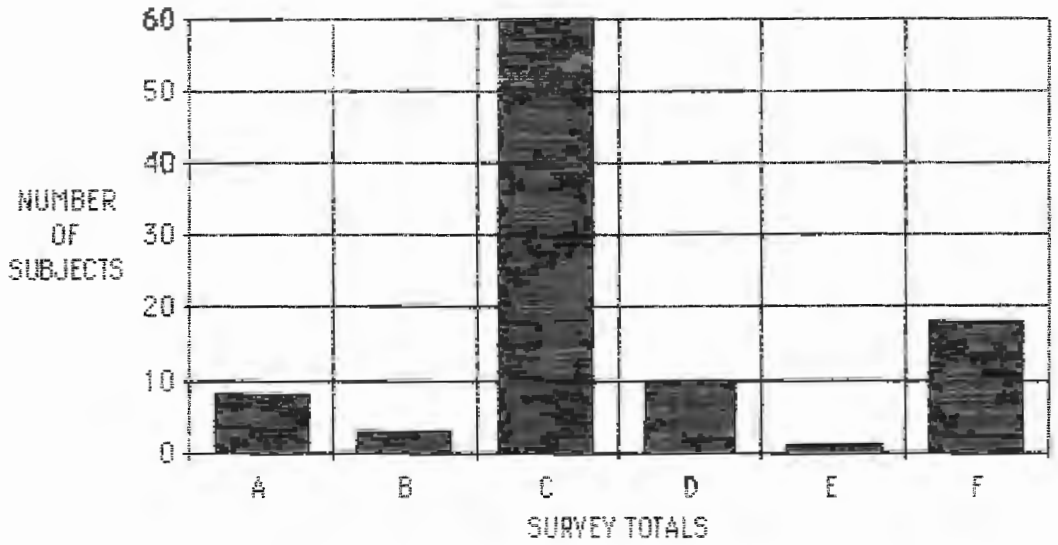


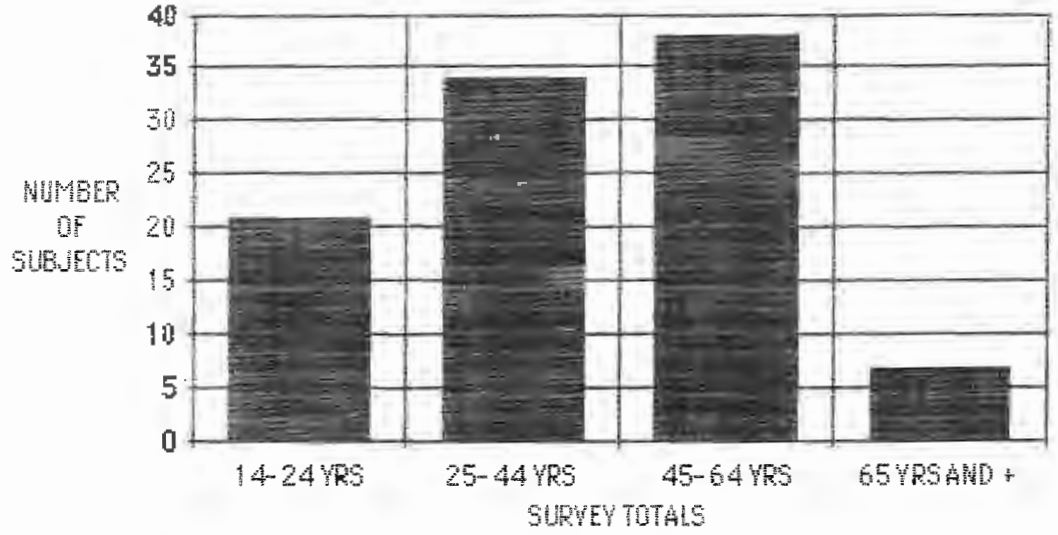
QUESTION 7 : VISION EXAM



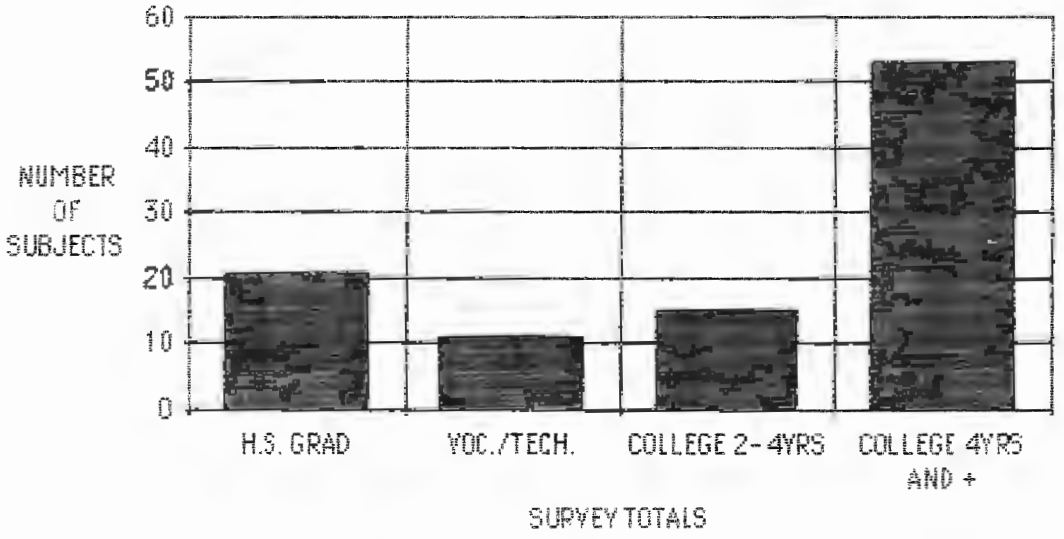
QUESTION 7 : VISION EXAM



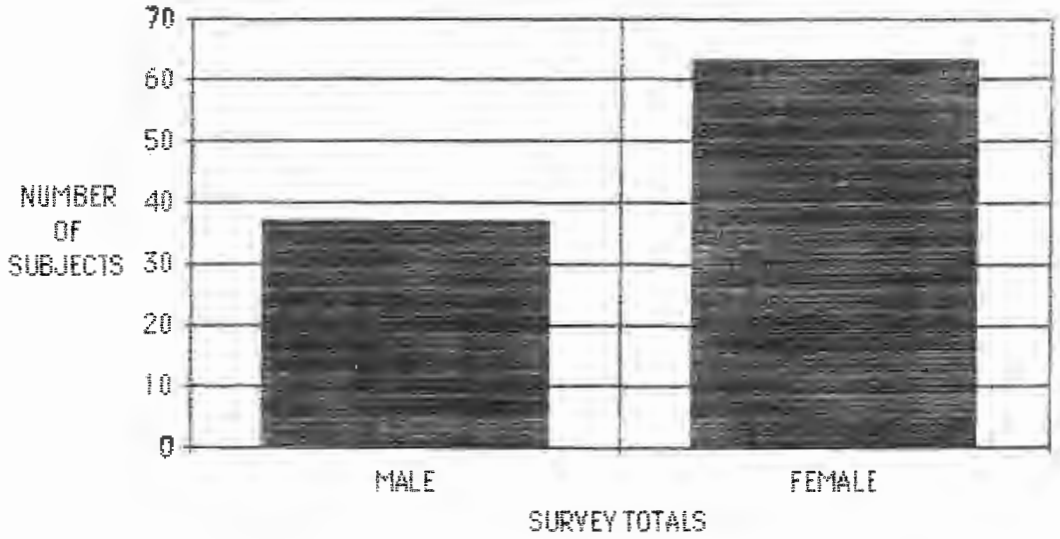
PROFILE 1 : AGE



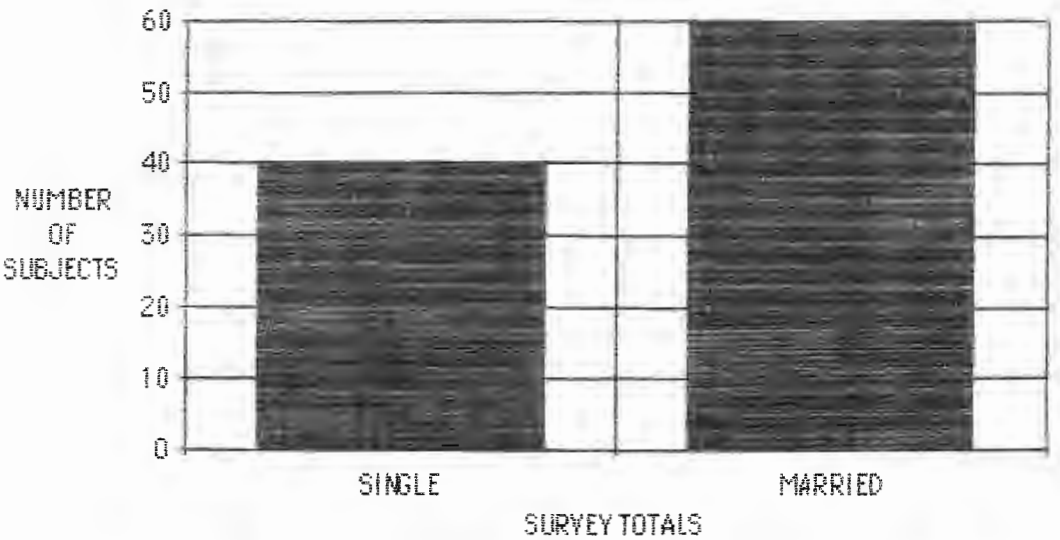
PROFILE 2 : EDUCATION LEVEL



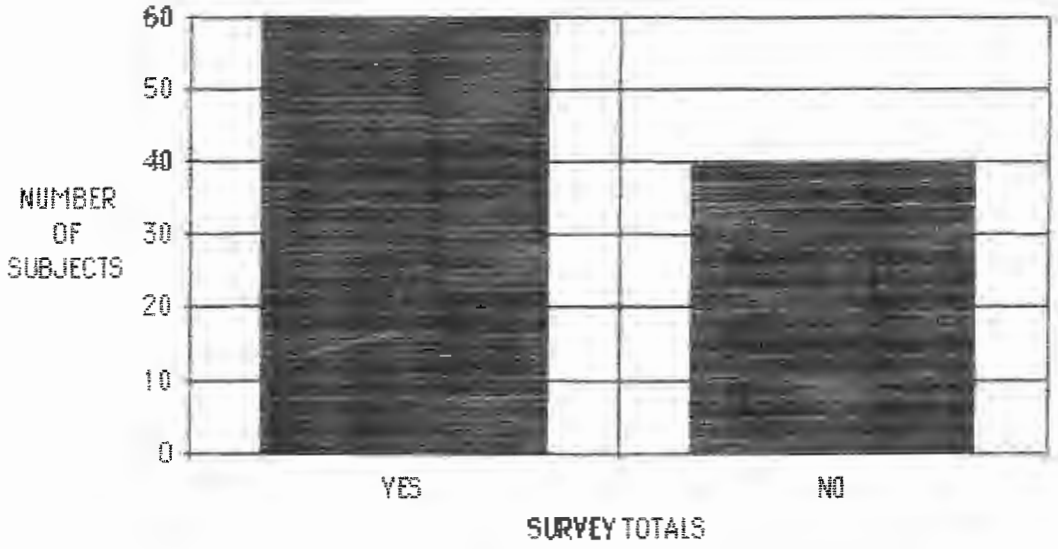
PROFILE 3 : SEX



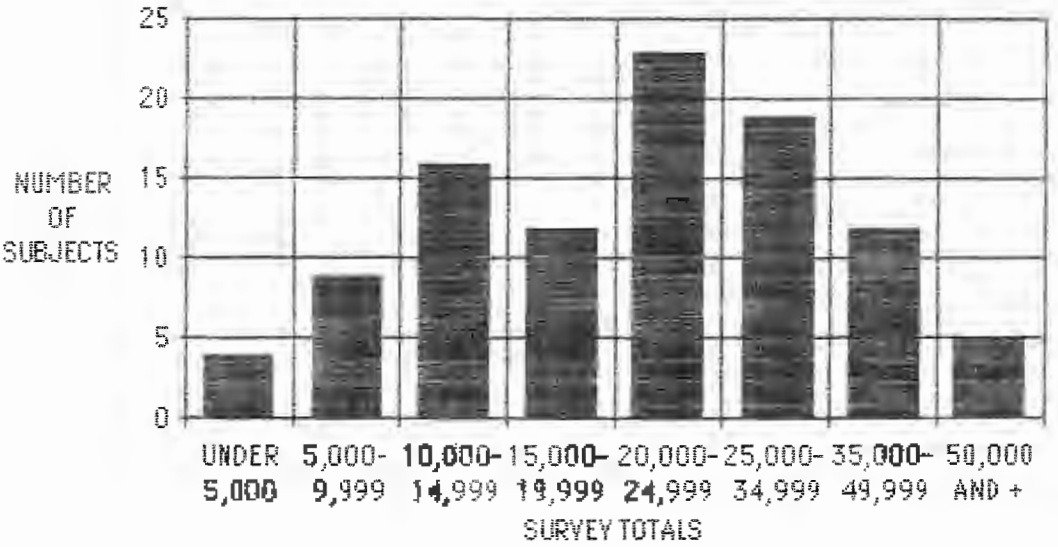
PROFILE 4 : MARITAL STATUS



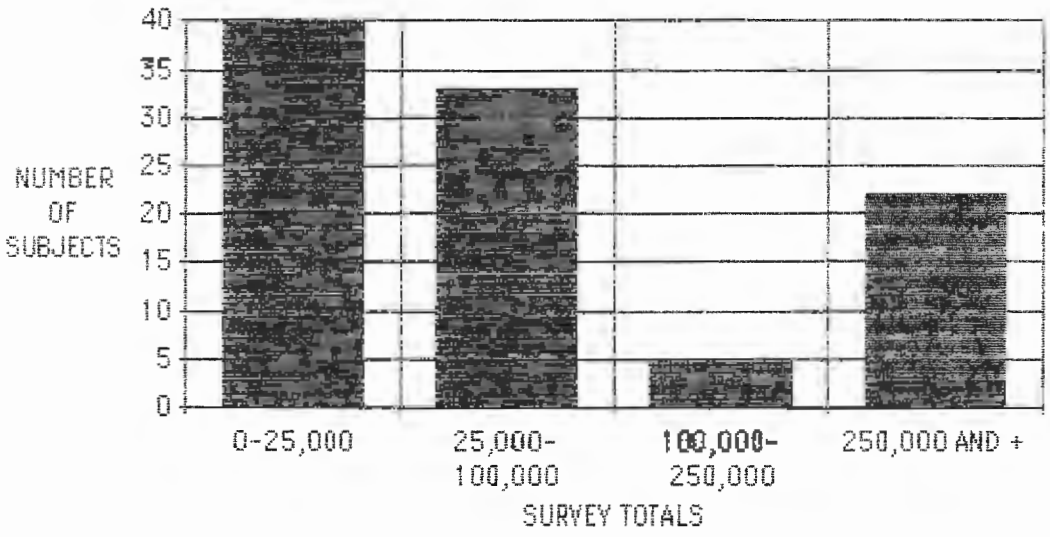
PROFILE 5 : HEALTH INSURANCE-EYECARE



PROFILE 7 : FAMILY INCOME/YEAR



PROFILE 8 : RESIDENTIAL POPULATION



DISCUSSION

Question 1 : Contact Lenses

The interaction between the age of the subject and their choice of advertisement for contact lenses was significant (p=.0004). In the 14-24 years old age group 33% were attracted to the commericial direct mail flyer (Choice E), however 53% of the subjects in the 45-64 years old age group decided that the professional yellow page ads (Choice C) were most useful.

Significance (p=.0001) was also found when comparing the highest education level of the subject and their selection of ad. Although most of subjects with a high school education and those with four or more years of college found the professional yellow pages (Choice C) as being the most beneficial, 43% and 42% respectively. It is also interesting to note that 69% of the subjects who picked the yellow pages (Choices C & D) had a college education of four or more years.

In this question concerning contact lenses, sex didn't make a different in the way the subjects responded to the advertisements (p=.085).

Family incomes per year appeared to cluster in the $20,000 to $25,000 range, and 30% of these subjects stated they found the commercial newspaper ads (Choice B) to be most helpful. The $25,000 to $35,000 income group made a solid statement with 63% of the subjects picking the private practicing optometrist's yellow page ads (Choice C).

Advertisement selection was significantly associated with income (p=.1740).

Question 2 : Repair / Replace Rx

The study showed age of the subject did make a notable difference (p=.018) in which type of media they would search to have a prescription replaced or repaired. The younger population (62%) went with the commercial corporation's yellow page ads (Choice D) where fast service was emphasized, and the older population (42%) sought the quality-stressed professional yellow page print (Choice C).

Education level of the sample also showed a significant mark (p=.0001), with the yellow pages (Choices C & D) getting most of the votes.

Sex of the subject made a significant difference (p=.0134) in their choice of advertisement to have a prescription repaired or replaced.

Two-thirds of the higher income bracket and 44% of the lower income bracket preferred the professional yellow page articles (Choice C) when in need of eyeglasses repair or replacement.

The yellow pages (Choices C & D) definately won the public's vote on this question with 68%, and direct mailings (Choices E & F) finished the poorest with only 4%.

Question 3 : Ocular Pathology

Age of the subject did make a significant difference (p=.0006) in their selection of the different types of print media. However most of the subjects in each age group: 14-24 years old, 43%; 25-44 years old, 50%; and 45-64 years old, 68%; felt more comfortable with the professional yellow pages (Choice C) in dealing with symptoms of conjunctivitis.

The same results were found when comparing the subject's selections and their highest level of education (p=.0001). The majority of people

with educations at the high school level (57%), vocational/tech. school level (73%), and four or more years of college (60%) sided with yellow page ads from optometrists with private practices (Choice C). When faced with red, swollen eyes, the subjects with a college education of 2-4 years were split evenly between the professional yellow pages (Choice C) and the professional pamphlet from a private office (Choice F), with one-third of this population committed to each display.

In this question regarding ocular health, sex was independent of the subject's opinions of the different print medias (p=.1604).

There was a significant association (p=.0028) between yearly income and choice of ad in this question. All income levels in the study who had more than 10% of the population decided the professional yellow pages (Choice C) were the most practical place to search for an optometrist when approached with an ocular health dilemma.

All four socio-economic profiles tested showed significant relationships with the subject's choices of the different print medias.

The rank of the medias for this question were the yellow pages (Choices C & D), direct mail leaflets (Choices E & F), and newspaper (Choices A & B) with 62%,28%, and 12% of the population respectively.

Question 4 : Fashion Change

The choice of advertisement found attractive to the person looking for a change in eyewear fashion was influenced by age (p=.0017) and family income (p=.0191), but was independent of education level (p=.3573) and sex (p=.1483).

The results showed 48% of the sample population would be apt to take advantage of newspaper ads (Choices A & B) when in need of a new frame. The commercial optometric corporations (Choices B, D, & E) won most of the fashion business with 63% of the subjects picking their ads in this question.

Question 5 : Vision Therapy

The interaction between the age of the subject and their preference of optometric practice when confronted with a child's reading problem was not significant (p=.0556).

A statical association (p=.0001) was found for both education level and sex when compared to the sample population's options on the different types of print media.

The study revealed that 86% of the subjects felt more comfortable with a private practice (Choices A, C, & F) when dealing with a problem of this sort. 54% of the subjects would turn to the yellow pages (Choices C & D) to find an optometrist who conducts vision therapy sessions. The private practice direct mail pamphlet (Choice F) was also a respectable choice receiving 30% of the subject's vote.

Question 6 : Prescription Change

There was no significant difference (p=.0908) between the ages of the subjects and how they answered this survey question. However most subjects in each age group, 46% of the total sample, found the yellow page ads from private practicing optometrists (Choice C) as being a trustworthy place for a prescription change.

The interaction between the education level of the subject and their choice of advertisement was significant (p=.0002). The majority of the subjects with a high school education and those with four or more years of college found the professional yellow pages (Choice C) as being the most beneficial, 62% and 55% respectively.

The survey results showed sex to be independent (p=.2432) of where the subject thought would be the best place to check to have a prescription changed.

For a decrease in distance vision, income level did influence (p=.0046) the subject's opinion on the different types of print media. An interesting point to note in the $25,000- $35,000 income level, 74% said they would look in the yellow pages for a private optometrist (Choice C) when noticing a change in vision.

Question 7 : Vision Exam

When questioned on the type of media which would attract the subject's attention for a comprehensive vision exam, significant differences existed in comparing selections to age (p=.0449), education (p=.0001), and income (p=.0001). There was not a statistical association (p=.276) in the correlation between sex of the subject and his or her response to the question.

The rank of the medias, for a complete vision exam, from highest number of subject's votes to the lowest : yellow pages (Choices C & D) 70%, direct mail (Choices E & F) 19%, and newspaper (Choices A & B) 11%.

Of the subjects who had a college education of four or more years, 74% stated they would use the yellow pages and pick a private office for an eye exam (Choice C).

Of the subjects in the $35,000-$50,000 income bracket, 83% elected to use an ad in the yellow pages from a private practioner (Choice C) when they feel it is time to have their eyes examined.

CONCLUSION

To summarize the population's choice of the various types of print media, which they felt were most effective in choosing an optometrist for each of the survey's questions, the following chart (Figure 3.) was devised:

Figure 3.

	NEWSPAPER	YELLOW PAGES	DIRECT MAIL
QUESTION 1 (Contact Lenses)	22%	43%	35%
QUESTION 2 (Repair/Replace Rx)	29%	68%	4%
QUESTION 3 (Ocular Pathology)	12%	62%	26%
QUESTION 4 (Fashion Change)	38%	44%	18%
QUESTION 5 (Vision Therapy)	4%	58%	38%
QUESTION 6 (Prescription Change)	15%	62%	23%
QUESTION 7 (Vision Exam)	11%	70%	19%
TOTALS (Total Population)	19%	58%	23%

There are advantages and disadvantages for each of the different types of print media. Some of the advantages of using newspaper for advertising are: flexibility; good local market coverage; broad acceptance; and a high believeability rating from the public. Disadvantages of newspaper ads include: short life time of advertisement, poor reproduction quality, and a small "pass-along" audience.

Direct mail has the following advantages : subject selectivity, flexibility, no advertisement competition within the same media, and personalization. Direct mail's limitations combine it's "junk mail" image with a relatively high cost.

Yellow page advertisements listing doctor's names, services, memberships, specialties, location, and hours have a proven effectiveness in drawing patients to your practice. In 1983, Chilton Research Services conducted an independent study of a cross-section of the United States population[8] which showed the following:

1.) Of all adults seeking information about optometrists, every year two out of five used the yellow pages.

2.) Each person used the yellow pages 1.6 times when looking for these services.

3.) More than 80% of these uses were followed up by action: a phone call, visit, or letter.

This study showed a even higher number of people using the yellow pages for their optometric needs with 58% of the population. The results of the study clearly reveal the yellow pages as being the most popular form of print media when in need of an optometrist (Figure 3). The yellow

pages had the majority of the population's votes in all seven questions. Direct mail pamphlets and flyers finished a close second (43% to 35%) in Question 1, which pertained to the subjects being fit with contact lenses. Newspaper advertisements seemed to be a reasonable choice in Question 4, concerning a eyewear fashion change, with 38% of the population compared to the yellow page's 44%.

The yellow pages are the public's favorite choice of print media. Use of the yellow pages has been standard in the profession for years, and seems to receive the least controversy compared to other types of print media.

However, it is beyond the intent of this survey study to identify the causes for existing differences between the medias. Several reasons have been hypothesized, but further research is necessary.

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